

IN THE HON'BLE NATIONAL GREEN TRIBUNAL
Application Number 21 OF 2014

IN THE MATTER OF

Shri Vardhaman Kaushik Petitioner

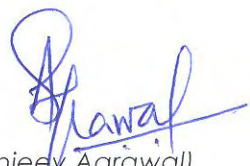
Versus

Union of India & Others.....Respondents

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DELHI
DATED: 24.02.2015


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FINAL REPORT ON AIR QUALITY STATUS IN THE National Capital Region

*As per Hon'ble National Green Tribunal order in the application No. 21 of 2014
(In the matter of Vardhman Kaushik Vs. Union of India)*



**CENTRAL POLLUTION CONTROL BOARD
MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE**

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1.0 INTRODUCTION

Delhi, also known as the National Capital Territory of India is the capital territory of India. Such is the nature of urban expansion in Delhi that its growth has expanded beyond the NCT to incorporate towns in neighboring states and at its largest extent can count a population of about 25 million residents as of 2014, and is the largest urban agglomeration in India by land area and population. The NCT and its urban region have been given the special status of National Capital Region (NCR) under the Constitution of India's 69th amendment act of 1991. The NCR includes the neighbouring cities of Gurgaon, Noida, Ghaziabad, Faridabad, Neharpar (Greater Faridabad), and Greater Noida, Sonapat, Panipat, Karnal, Rohtak, Bhiwani, Rewari, Baghpat, Meerut, Alwar, Bharatpur and other nearby towns.

Delhi and its nearby territories are together called the National Capital Region (NCR). National Capital Region (NCR) is a unique example of inter-state regional development planning for a region, having a total area of over 33500 SqKms spanning over 15 districts in the states of U.P, Haryana, and Rajasthan and National Capital Territory of Delhi, with the Nation Capital as its core. The National Capital Region (NCR) in India was constituted under the NCRPB Act, 1985; the key rationale was to promote balanced and harmonized development of the Region, and to contain haphazard and unplanned urban growth by channelizing the flow and direction of economic growth (on which the urban phenomenon feeds) along more balanced and spatially-oriented paths. National Capital Region (NCR) is a unique example of inter-state regional development planning for a region with NCT-Delhi as its core. The National Capital Region as notified covers an area of about 34,144 sqkms falling in the territorial jurisdictions of four State Governments namely, National Capital Territory of Delhi, Haryana, UP, and Rajasthan and constitutes about 1.60% of the country's land area. Sub-region wise area details are as under:

Sub-Region	Name of the Districts	Number of cities/towns	Area (in sqkms)
Haryana	Faridabad, Gurgaon, Mewat, Rohtak, Sonapat, Rewari, Jhajjhar, Panipat and Palwal	09	13,428
Uttar Pradesh	Meerut, Ghaziabad, Greater Noida (GBN), Noida, Bulandshahr, Hapur and Baghpat	07	10,853
Rajasthan	Alwar&Bhiwadi	02	8,380
Delhi	NCT of Delhi	01	1,483
		Total:19	Total: 34,144

2.0 SCOPE OF WORK AS PER THE ORDER OF HON'BLE NATIONAL GREEN TRIBUNAL DATED 04/12/2014 & 19/01/2015

As per Order of Hon'ble National Green Tribunal (NGT) in its order on 04.12.2015 as under:

"We direct a team of CPCB, DPCC, a Scientist from MoEF, a Scientist from state Boards of State of Rajasthan, State of Haryana and State of Uttar Pradesh to take ambient air quality samples from the entire NCR Delhi at different intervals and times. The samples would be taken during the peak hours as well as non-peak hours. The sample shall definitely be collected in the early morning hours and late evening hours. The complete analysis of this data for all parameters of NAAQS 2006 shall be made and comparison with the national ambient air quality specified in the Notification dated 18th November, 2009 issued by the MoEF in relation to the air quality standards specified therein shall be made. This report shall also identify the environmentally safest period of the day when residents of Delhi would be exposed to minimum injury to their health."

In continuation of the Hon'ble Tribunal hold next hearing dated 12/01/2015 and 19/01/2015 wherein Hon'ble National Green Tribunal (NGT) ordered on 19.01.2015 as under:

"All the directions issued by the Tribunal, particularly in relation to the vehicular pollution shall be carried out by all the concerned agencies without delay and default. The Expert Team (CPCB) shall take ambient air quality sample from all the Borders of Delhi and the adjacent area and submit the analysis reports before the Tribunal prior to the next date of hearing".

The summary of scope of the work in accordance with the decision taken in the meeting dated 26/12/2014 and 11/02/2015 is given in Table 1 and summary of selected Borders of NCT of Delhi considered in the Second Meeting of Committee constituted by Hon'ble NGT and MOEF&CC, Govt. of India is given in Table 2.

Table 1: Scope of work

Sl. No.	Description of Monitoring	Monitoring Period/days as per decisions taken in the two meetings (26/12/2014 and 11/02/2015)	Frequency
1.	Ambient Air Quality monitoring and analysis for SO ₂ , NO ₂ , PM ₁₀ existing monitoring locations/ cities fall under NCR	<ul style="list-style-type: none"> ✓ 1st Set of data: One month (04/12/2014 to 03/01/2015) for existing monitoring stations in Delhi and NCR; ✓ One time monitoring (snap shot) on those cities not monitored in NCR ✓ 2nd Set of data: One month plus (05/01/2015 to 10/02/2015) for existing monitoring stations in Delhi and NCR; 	<ul style="list-style-type: none"> ✓ SO₂, NO₂, (for 4 hourly and 24hourly average monitoring values) ✓ PM₁₀, (for 8 hourly and 24 hourly average monitoring values); ✓ PM_{2.5} (Hourly for 24 hourly average monitoring values)

Sl. No.	Description of Monitoring	Monitoring Period/days as per decisions taken in the two meetings (26/12/2014 and 11/02/2015)	Frequency
2.	Ambient Air Quality monitoring on Selected locations/ Cities and analysis for PM _{2.5} , CO, O ₃ , NH ₃ , C ₆ H ₆	<ul style="list-style-type: none"> ✓ 1st Set of data: One month (04/12/2014 to 03/01/2015) for existing monitoring stations in Delhi and NCR; ✓ One time monitoring (snap shot) on those cities which are not monitored in NCR; ✓ 2nd Set of data: One month plus (05/01/2015 to 10/02/2015) for existing monitoring stations in Delhi and NCR; 	<ul style="list-style-type: none"> ✓ PM_{2.5} (Hourly for 24 hourly average monitoring values) ✓ CO (for 1 hourly average and 8 hourly average values) ✓ O₃ (for 1 hourly average and 8 hourly average values) ✓ NH₃ (24 hourly average monitoring values) ✓ C₆H₆ (24 hourly average monitoring values)
3.	Ambient Air Quality monitoring and analysis for SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} near Borders of NCT Delhi	<ul style="list-style-type: none"> ✓ 3rd Set of data: Two days monitoring in February 2015 month (16/02/2015 & 17/02/2015) on <i>seven Borders of NCT, Delhi</i> as below: <ul style="list-style-type: none"> i.) NH-24 bypass road: Delhi-Moradabad; ii.) NH-2 : Delhi-Agra; iii.) NH-236 : Mehrauli-Gurgaon; iv.) NH-10 : Rohtak Road; v.) NH-1 : Delhi-Ambala; vi.) NH-24 (GT Road); vii.) Noida-Greater Noida Expressway 	<ul style="list-style-type: none"> ✓ PM₁₀, (for 8 hourly and 24 hourly average monitoring values) ✓ PM_{2.5} (Hourly or 24 hourly average monitoring values); ✓ SO₂, NO₂, (for 4 hourly and 24 hourly average monitoring values)

Table 2: Selected Border Locations/Areas for monitoring of AAQ in NCT of Delhi (Delhi Border Roads)

Sl. no.	Name of Road with number of Expressway/ National Highway/ State Highway	Location of monitoring near to Delhi Border	Monitoring to be conducted by the agencies
1	NH-24 bypass road : Delhi-Moradabad	UP Gate (Hapur Moradabad Road)	U.P. SPCB DPCC (Anand Vihar)
2	NH-2 : Delhi-Agra	Badarpur (Mathura Road)	Haryana SPCB
3	NH-236 : Mehrauli-Gurgaon	Gurgaon (Jaipur Road)	Haryana SPCB
4	NH-10 : Rohtak Road	Tikri Kalan (Bahadurgarh -Rohtak Road)	Haryana SPCB
5	NH-1 : Delhi-Ambala	Narela / Alipur Border Road (Panipat-Karnal Road)	Haryana SPCB
6	NH-24 (GT Road)	Dilshad Garden (J&K Pocket) road approaching to Mohan Nagar (Apsara Border), Ghaziabad	U.P. SPCB CPCB (Dilshad Garden)
7	Noida-Greater Noida Expressway	Boarder near toll, Road towards Greater Noida Dadri	U.P. SPCB

3.0 STUDY SITE & MONITORING LOCATIONS

As per Hon'ble NGT order dated 04.12.2014 and subsequent minutes of the meeting held on 26.12.2014 at CPCB and in continuation of this Hon'ble NGT further heard the matter on 19.01.2015 and directed to the committee constituted under the Chairmanship of Advisor, MOEF&CC, Govt. of India, the Central Pollution Control Board and State Pollution Control Boards, Pollution Control Committees such as Haryana State Pollution Control Board (HSPCB), Rajasthan State Pollution Control Board (RSPCB), Uttar Pradesh State Pollution Control Board (UPSPCB), Delhi Pollution Control Committee (DPCC) to furnish the data of ambient air quality monitoring of the existing monitoring stations of the respective cities in NCR region (both from manual and continuous monitoring stations) from 4th of December, 2014 to 5th of January, 2015 and 06.01.2015 to 10.02.2015 as a second set of AAQ data of NCT Delhi and NCR. Further, to get an overview of ambient air quality in those cities of NCR, where no AAQ monitoring stations exists, all the SPCB's/PCC' should carry out at least one day monitoring (Snap shots). Furtherance to this, the Hon'ble NGT also directed to *"The Expert Team (CPCB) shall take ambient air quality sample from all the Borders of Delhi and the adjacent area and submit the analysis reports before the Tribunal prior to the next date of hearing" i.e. 25th February 2015.*

The locations for monitoring in NCR are given in Table 3.

Table 3: Ambient Air Quality monitoring locations in NCR

Sl. No.	State	City	Monitoring agency	Location	Mode of monitoring
1.	Delhi	Delhi	DPCC	R K Puram	Continuous
2.	Delhi	Delhi	DPCC	Punjabi Bagh	Continuous
3.	Delhi	Delhi	DPCC	Mandir Marg	Continuous
4.	Delhi	Delhi	DPCC	AnandVihar	Continuous
5.	Delhi	Delhi	DPCC	Civil Lines	Continuous
6.	Delhi	Delhi	DPCC	IGI Airport	Continuous
7.	Delhi	Delhi	CPCB	DMS, Shadipur	Continuous
8.	Delhi	Delhi	CPCB	IHBAS	Continuous
9.	Delhi	Delhi	CPCB	NSIT	Continuous
10.	Delhi	Delhi	CPCB	Pitampura	Manual
11.	Delhi	Delhi	CPCB	Sirifort	Manual
12.	Delhi	Delhi	CPCB	Janakpuri	Manual
13.	Delhi	Delhi	CPCB	Nizamuddin	Manual
14.	Delhi	Delhi	CPCB	Shahzada Bagh	Manual
15.	Delhi	Delhi	CPCB	Shahdara	Manual
16.	Haryana	Faridabad	Haryana SPCB	Faridabad	Continuous
17.	Haryana	Faridabad	Haryana SPCB	M/s Escorts Research centre, Mathura Road	Manual
18.	Haryana	Faridabad	Haryana SPCB	Haryana RO SPCB Sector-16A	Manual
19.	Haryana	Gurgoan	Haryana SPCB	Vikas Sadan,	Continuous
20.	Haryana	Rohtak	Haryana SPCB	MDU,ROHTAK	Continuous

21.	Haryana	Dharuhera	Haryana SPCB	Dharuhera Chungi Disttt. Rewari	One time monitoring, manual
22.	Haryana	Hisar	Haryana SPCB	LPS, Hisar Road Rohtak	One time monitoring, manual
23.	Haryana	Sonepat	Haryana SPCB	Near Kundli border, Sonepat	One time monitoring, manual
24.	Haryana	Panipat	Haryana SPCB	IOC Refinery, Panipat	One time monitoring, manual
25.	Haryana	Panipat	Haryana SPCB	IOC Township	One time monitoring, manual
26.	Haryana	Faridabad	Haryana SPCB	NH-2 : Delhi-Agra Badarpur (Mathura Road)	Manual
27.	Haryana	Gurgaon	Haryana SPCB	NH-236 : Mehrauli-Gurgaon Gurgaon (Jaipur Road)	Manual
28.	Haryana	Bahadurgarh	Haryana SPCB	NH-10 : Rohtak Road, Tikri Kalan (Bahadurgarh Road)	Manual
29.	Haryana	Sonepat	Haryana SPCB	NH-1 : Delhi-Ambala Narela / Alipur Road (Panipat Road)	Manual
30.	Rajasthan	Alwar	Rajasthan SPCB	GAURAV SOLVEX LTD	Manual
31.	Rajasthan	Alwar	Rajasthan SPCB	R.O.BUILDING	Manual
32.	Rajasthan	Alwar	Rajasthan SPCB	RIICO PUMP HOUSE	Manual
33.	Rajasthan	Bhiwadi	Rajasthan SPCB	Regional Office building	Manual
34.	Rajasthan	Bhiwadi	Rajasthan SPCB	UIT Guest House	Manual
35.	Rajasthan	Bharatpur	Rajasthan SPCB	R.O. Building	Manual
36.	Rajasthan	Bharatpur	Rajasthan SPCB	RIICO Office	
37.	Uttar Pradesh	Noida	Uttar Pradesh SPCB	Sector-1, NOIDA	Manual
38.	Uttar Pradesh	Noida	Uttar Pradesh SPCB	Sector-6, NOIDA	Manual
39.	Uttar Pradesh	Ghaziabad	Uttar Pradesh SPCB	Sahibabad Industrial Area	Manual
40.	Uttar Pradesh	Ghaziabad	Uttar Pradesh SPCB	B.S. Road Industrial Area	Manual
41.	Uttar Pradesh	Hapur	Uttar Pradesh SPCB	Near DPS School, Delhi Road, Village, Acheja, Hapur	One time monitoring, manual
42.	Uttar Pradesh	Hapur	Uttar Pradesh SPCB	Near Hapur Development Authority	One time monitoring, manual
43.	Uttar Pradesh	Ghaziabad	Uttar Pradesh SPCB	NH-24 bypass road : Delhi-Moradabad UP Gate (Hapur Moradabad Road)	Manual
44.	Uttar Pradesh	Mohan Nagar	Uttar Pradesh SPCB	NH-24 (GT Road) Dilshad Garden (J&K poket) road approaching to Mohan Nagar (Apsara theatre)	Manual
45.	Uttar Pradesh	Greater Noida / Dadri	Uttar Pradesh SPCB	Noida-Greater Noida Expressway Boarder near toll, Road towards Greater Noida Dadri	Manual
	State= 4	City=16	Agency=5	AAQ samples/ Monitoring=45	

Figure-1 Map of National Capital Region



4.0 MONITORING PLAN

As per Hon'ble NGT order dated 04.12.2014, 19.01.2015 and subsequent minutes of the meetings held on 26.12.2014 at CPCB and 11.02.2015 in MoEF & CC, the monitoring plan was finalized by the committee constituted by MOEF&CC and Hon'ble NGT. The monitoring shall be conducted as per AAQ Monitoring Guidelines of National (NAMP) project of CPCB. As per the decision taken in the two meetings, the following monitoring strategies were discussed:

1) *Ambient Air Quality monitoring and analysis for SO₂, NO₂, PM₁₀ existing monitoring locations/ cities fall under NCR:*

- ✓ 1st Set of Monitoring plan: One month (04/12/2014 to 03/01/2015) for existing monitoring stations in Delhi and NCR;
- ✓ One time monitoring (snap shot) on those cities not monitored in NCR;
- ✓ 2nd Set of monitoring plan: One month plus (05/01/2015 to 10/02/2015) for existing monitoring stations in Delhi and NCR;

2) *Ambient Air Quality monitoring on Selected locations/ Cities and analysis for PM_{2.5}, CO, O₃, NH₃, C₆H₆:*

- ✓ 1st Set of monitoring plan: One month (04/12/2014 to 03/01/2015) for existing monitoring stations in Delhi and NCR;
- ✓ One time monitoring (snap shot) on those cities which are not monitored in NCR;
- ✓ 2nd Set of monitoring plan: One month plus (05/01/2015 to 10/02/2015) for existing monitoring stations in Delhi and NCR;

3) *Ambient Air Quality monitoring and analysis for SO₂, NO₂, PM₁₀, PM_{2.5} near Borders of NCT Delhi:*

- ✓ 3rd Set of Monitoring plan: Two days monitoring in February 2015 month (16/02/2015 & 17/02/2015) on *seven Borders of NCT, Delhi* as below:
 - i.) *NH-24 bypass road: Delhi-Moradabad;*
 - ii.) *NH-2 : Delhi-Agra;*
 - iii.) *NH-236 : Mehrauli-Gurgaon;*
 - iv.) *NH-10 : Rohtak Road;*
 - v.) *NH-1 : Delhi-Ambala;*
 - vi.) *NH-24 (GT Road);*
 - vii.) *Noida-Greater Noida Expressway*

5.0 METHODOLOGY FOR MONITORING & DATA COLLECTION

As per Hon'ble National Green Tribunal order in the application No.21 of 2014, the gaseous and particulate pollutants (parameters) were monitored with a frequency of 1 hourly, 4 hourly, 8 hourly and 24 hourly as per the guidelines of CPCB/MoEF in NCR as per the methodologies given in the National Ambient Air Quality Standards (Table 4).

Table 4: Revised National Ambient Air Quality Standards (NAAQS)

[NAAQS Notification dated 18th November, 2009]

Sl. No.	POLLUTANTS	Time Weighted Average	CONCENTRATION IN AMBIENT AIR		METHODS OF MEASUREMENT
			Industrial, Residential, Rural and other Areas	Ecologically Sensitive Area (notified by Central Government)	
1	Sulphur Dioxide (SO ₂), µg/m ³	Annual*	50	20	1. Improved West and Gaeke 2. Ultraviolet Fluorescence
		24 Hours**	80	80	
2	Nitrogen Dioxide (NO ₂), µg/m ³	Annual*	40	30	1. Modified Jacob & Hochheiser (Na Arsenite) 2. Chemiluminescence
		24 Hours**	80	80	
3	Particulate Matter (Size <10µm) or PM ₁₀ µg/m ³	Annual*	60	60	1. Gravimetric 2. TEOM 3. Beta attenuation
		24 Hours**	100	100	
4	Particulate Matter (Size <2.5 µm) or PM _{2.5} µg/m ³	Annual*	40	40	1. Gravimetric 2. TEOM 3. Beta attenuation
		24 Hours**	60	60	
5	Ozone (O ₃), µg/m ³	8 hours**	100	100	1. UV photometric 2. Chemiluminescence 3. Chemical Method
		1 hours**	180	180	
6	Lead (Pb), µg/m ³	Annual*	0.50	0.50	1. AAS/ICP Method after sampling using EPM 2000 or equivalent filter paper 2. ED-XRF using Teflon filter
		24 Hour**	1.0	1.0	
7	Carbon Monoxide (CO), mg/m ³	8 Hours**	02	02	Non dispersive Infra Red (NDIR) Spectroscopy
		1 Hour**	04	04	
8	Ammonia (NH ₃), µg/m ³	Annual*	100	100	1. Chemiluminescence 2. Indophenol blue method
		24 Hour**	400	400	
9	Benzene (C ₆ H ₆), µg/m ³	Annual*	05	05	1. Gas chromatography based continuous analyzer 2. Adsorption and Desorption followed by GC analysis
10	Benzo(a)Pyrene (BaP)-particulate phase only, ng/m ³	Annual*	01	01	Solvent extraction followed by HPLC/GC analysis
11	Arsenic (As), ng/m ³	Annual*	06	06	AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni), ng/m ³	Annual*	20	20	AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

* Annual Arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform interval. ** 24 hourly 08 hourly or 01 hourly monitored values, as applicable shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

NOTE: Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.

6.0 FINDINGS OF AMBIENT AIR QUALITY IN NCT OF DELHI & NCR

AMBIENT AIR QUALITY MONITORING

The analysis of all recorded parameters in the 13 cities of NCR covering 4 states is discussed below. The details of the ambient air quality status during monitoring period is given in Annexure-I.

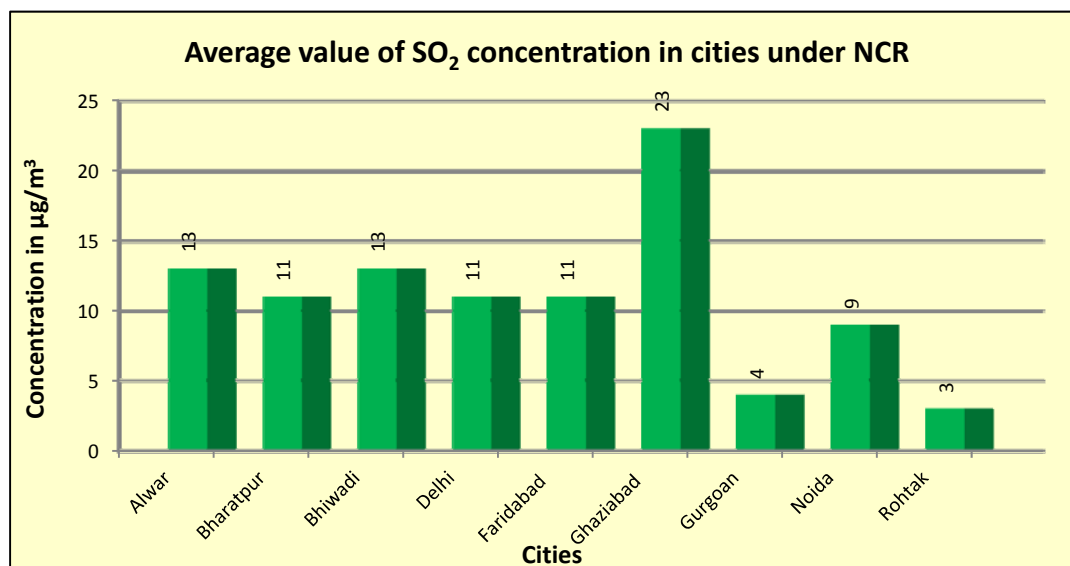
i.) Sulphur Dioxide (SO₂):

During the monitoring period, it has been observed that the average values of the total monitoring period (68 days period- 05.12.2014-10.02.2015) of SO₂ for all the cities ranged from 3µg/m³ to 23µg/m³ (Table 4, Figure 2). During the total monitoring period it was observed that all the cities monitored in NCR are within the NAAQS of 80 µg/m³ (24-hourly averages). Therefore, there are no exceedances with respect to 24-hourly NAAQS of 80µg/m³ of SO₂ (Table 6).

**Table 5: Status of SO₂ in the cities of NCR
(68 days period- 05.12.2014-10.02.2015; 24 Hourly NAAQS 2009-80µg/m³)**

City	State	Mode of monitoring	Average of SO ₂ (µg/m ³)		
			1 st set of AAQ data (31 days - period 05.12.2014-04.01.2015)	2 nd set of AAQ data (37 days - period 05.01.2015-10.02.2015)	Average Value of two sets of AAQ data
Alwar (3)	Rajasthan	Manual	14	12	13
Bharatpur (2)	Rajasthan	Manual	-	11	11
Bhiwadi (2)	Rajasthan	Manual	13	-	13
Delhi (15)	Delhi	Manual & continuous	11	11	11
Faridabad (3)	Haryana	Manual & continuous	12	10	11
Ghaziabad (2)	Uttar Pradesh	Manual	23	23	23
Gurgaon (1)	Haryana	Continuous	4	4	4
Noida (2)	Uttar Pradesh	Manual	9	8	9
Rohtak (1)	Haryana	Continuous	3	3	3

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 24 hourly NAAQS for SO₂ for residential, rural, industrial and other area is 80µg/m³



**Figure 2: Sulphur dioxide (SO₂) concentration in cities under NCR
(Average of 68 days - period 05.12.2014-10.02.2015)**

Table 6: Status of SO₂ with no. of exceedences in the cities of NCR w.r.t. National Standard (68 days period- 05.12.2014-10.02.2015)

City	State	Mode of monitoring	SO ₂ (µg/m ³)					
			NAAQS-80µg/m ³ (24hourly average Standard)					
			1 st set of AAQ data (31 days - period 05.12.2014- 04.01.2015)		2 nd set of AAQ data (37 days - period 05.01.2015- 10.02.2015)		Total period of monitoring (68 days - period 05.12.2014- 10.02.2015)	
No. of observation	No. of observation exceeding NAAQS	No. of observation	No. of observation exceeding NAAQS	Total no. of observation	Total no. of observation exceeding NAAQS			
Alwar (3)	Rajasthan	Manual	25	0	30	0	55	0
Bharatpur (2)	Rajasthan	Manual	-	0	2	0	2	0
Bhiwadi (2)	Rajasthan	Manual	13	0	-	0	13	0
Delhi (15)	Delhi	Manual & continuous	207	0	271	0	478	0
Faridabad (3)	Haryana	Manual & continuous	18	0	27	0	45	0
Ghaziabad (2)	Uttar Pradesh	Manual	13	0	21	0	34	0
Gurgoan (1)	Haryana	Continuous	27	0	41	0	68	0
Noida (2)	Uttar Pradesh	Manual	12	0	21	0	33	0
Rohtak (1)	Haryana	Continuous	27	0	37	0	64	0

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 24 hourly NAAQS for SO₂ for residential, rural, industrial and other area is 80µg/m³

ii.) Nitrogen Dioxide (NO₂)

During the monitoring period, it has been observed that the average values of the total monitoring period (68 days period- 05.12.2014-10.02.2015) of NO₂ for all the cities ranged from 20µg/m³ to 67µg/m³ (Table 7, Figure 4). During the total monitoring period for NO₂, it was observed that Delhi exceeds the NAAQS of 80 µg/m³ (24-hourly averages) for 145 observations out of 581 observations and Faridabad exceeds the 24-hourly NAAQS for 2 observations out of 45 observations (Table 8, Figure 4). The remaining cities are within the National Standard (NAAQS 2009) for NO₂.

Table 7: Status of NO₂ in the cities of NCR (68 days period- 05.12.2014-10.02.2015; 24 Hourly NAAQS 2009-80µg/m³)

City	State	Mode of monitoring	Average of NO ₂ (µg/m ³)		
			1 st set of AAQ data (31 days - period 05.12.2014- 04.01.2015)	2 nd set of AAQ data (37 days - period 05.01.2015- 10.02.2015)	Average Value of two sets of AAQ data
Alwar (3)	Rajasthan	Manual	19	20	20
Bharatpur (2)	Rajasthan	Manual	-	20	20
Bhiwadi (2)	Rajasthan	Manual	21	21	21
Delhi (15)	Delhi	Manual & continuous	69	67	67
Faridabad (3)	Haryana	Manual & continuous	22	41	41
Ghaziabad (2)	Uttar Pradesh	Manual	37	37	37
Gurgoan (1)	Haryana	Continuous	35	31	31
Noida (2)	Uttar Pradesh	Manual	28	27	27
Rohtak (1)	Haryana	Continuous	35	30	30

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 24 hourly NAAQS for SO₂ for residential, rural, industrial and other area is 80µg/m³

**Figure 3: Nitrogen dioxide (NO₂) concentration in cities under NCR
(Average of 68 days - period 05.12.2014-10.02.2015)**

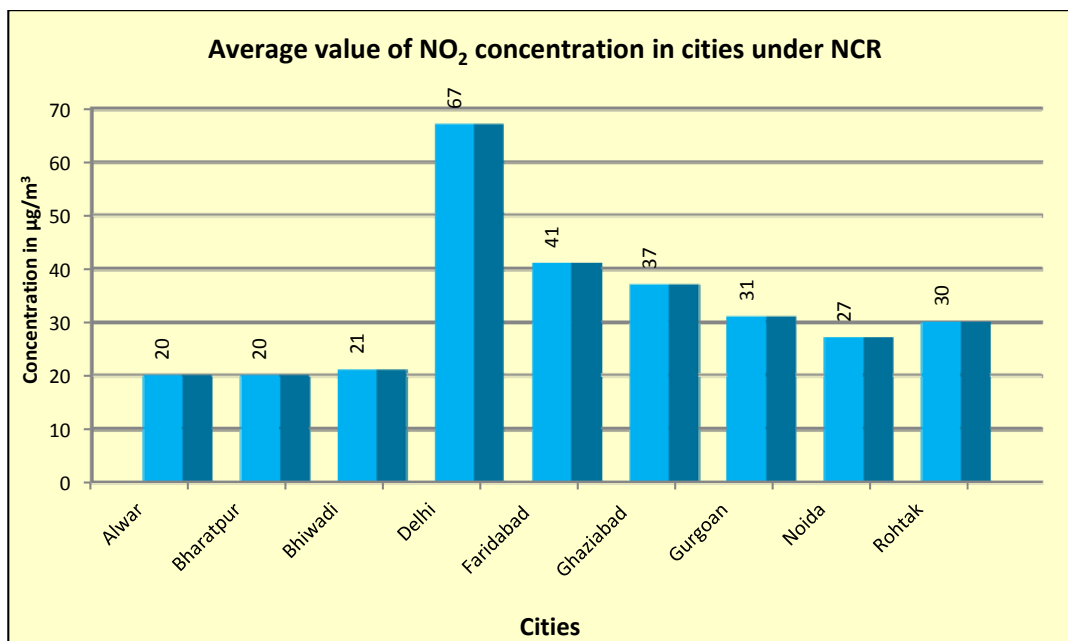
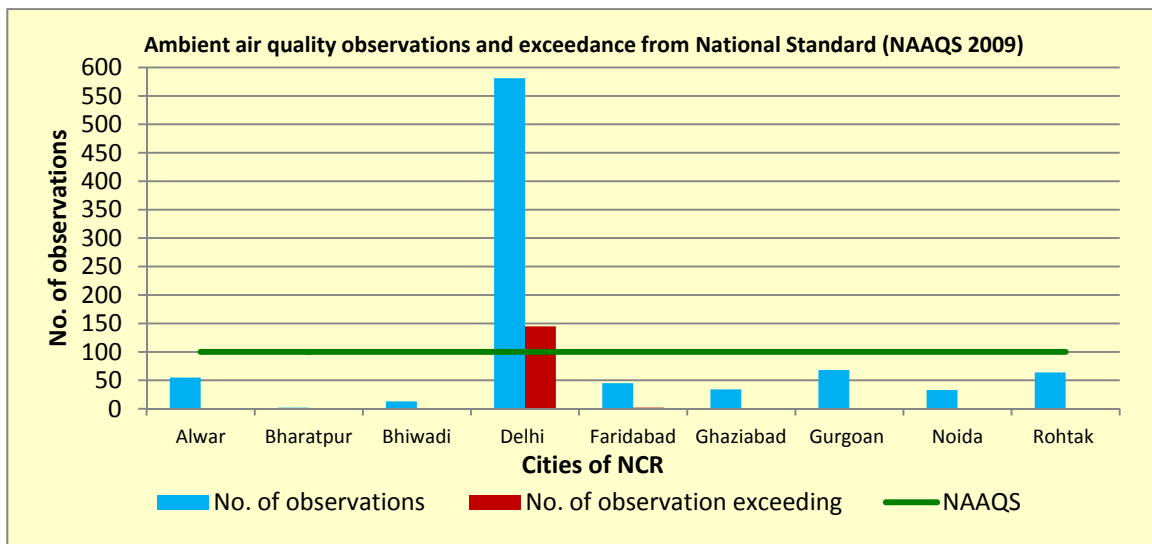


Table 8: Status of NO₂ with no. of exceedences in the cities of NCR w.r.t. National Standard (68 days period -05.12.2014-10.02.2015)

City	State	Mode of monitoring	NO ₂ (µg/m ³); NAAQS-80µg/m ³ (24hourly average)					
			1 st set of AAQ data (31 days - period 05.12.2014- 04.01.2015)		2 nd set of AAQ data (37 days - period 05.01.2015- 10.02.2015)		Total period of monitoring (68 days - period 05.12.2014- 10.02.2015)	
			No. of observation	No. of observation exceeding NAAQS	No. of observation	No. of observation exceeding NAAQS	Total no. of observation	Total no. of observation exceeding NAAQS
Alwar (3)	Rajasthan	Manual	25	0	30	0	55	0
Bharatpur (2)	Rajasthan	Manual	-	-	2	0	2	0
Bhiwadi (2)	Rajasthan	Manual	13	0	-	-	13	0
Delhi (15)	Delhi	Manual & continuous	306	70	275	75	581	145
Faridabad (3)	Haryana	Manual & continuous	18	0	27	2	45	2
Ghaziabad (2)	Uttar Pradesh	Manual	13	0	21	0	34	0
Gurgaon (1)	Haryana	Continuous	27	0	41	0	68	0
Noida (2)	Uttar Pradesh	Manual	12	0	21	0	33	0
Rohtak (1)	Haryana	Continuous	27	0	37	0	64	0

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 24 hourly NAAQS for NO₂ for residential, rural, industrial and other area is 80µg/m³

Figure 4: Number of observations and exceedance of NO₂ from National Standard (NAAQS 2009) (Average of 68 days - period 05.12.2014-10.02.2015)



iii.) Particulate Matter size less than and equal to 10 μ m (PM₁₀):

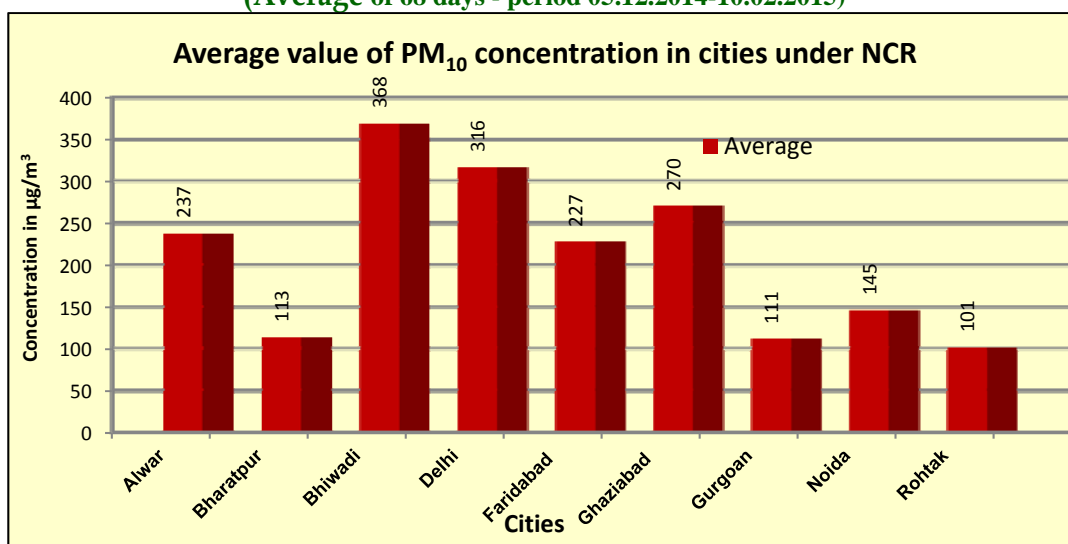
During the monitoring period, it has been observed that the average values of the total monitoring period (68 days period- 05.12.2014-10.02.2015) of PM₁₀ for all the cities ranged from 101 μ g/m³ to 368 μ g/m³ (Table 9, Figure 5). During the total monitoring period for PM₁₀, it was observed that all the cities exceeds the NAAQS of 100 μ g/m³ (24-hourly averages-Table 10, Figure 6). With respect to number of observations in case of Delhi 538 observations are exceeding the national standard out of 545 observations. Whereas, other cities such as Ghaziabad, Noida, Alwar indicating 100% exceedances (Refer Table 10).

Table 9: Status of PM₁₀ in the cities of NCR (68 days period- 05.12.2014-10.02.2015; 24 Hourly NAAQS 2009-100 μ g/m³)

City	State	Mode of monitoring	Average of PM ₁₀ (μ g/m ³)		
			1 st set of AAQ data (31 days - period 05.12.2014-04.01.2015)	2 nd set of AAQ data (37 days - period 05.01.2015-10.02.2015)	Average Value of two sets of AAQ data
Alwar (3)	Rajasthan	Manual	266	237	237
Bharatpur (2)	Rajasthan	Manual	-	113	113
Bhiwadi (2)	Rajasthan	Manual	368	368	368
Delhi (15)	Delhi	Manual & continuous	344	316	316
Faridabad (3)	Haryana	Manual & continuous	138	227	227
Ghaziabad (2)	Uttar Pradesh	Manual	276	270	270
Gurgaon (1)	Haryana	Continuous	113	111	111
Noida (2)	Uttar Pradesh	Manual	147	145	145
Rohtak (1)	Haryana	Continuous	104	101	101

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 24 hourly NAAQS for PM₁₀ for residential, rural, industrial and other area is 100 μ g/m³

**Figure 5: Particulate Matter (PM₁₀) concentration in cities under NCR
(Average of 68 days - period 05.12.2014-10.02.2015)**

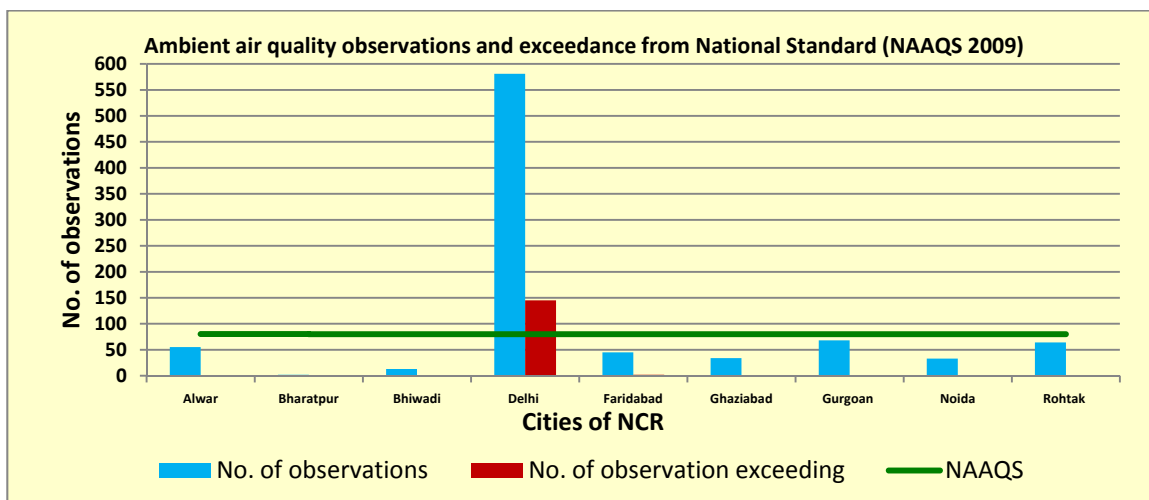


**Table 10: Status of PM₁₀ with no. of exceedences in the cities of NCR w.r.t. National Standard
(68 days period -05.12.2014-10.02.2015)**

City	State	Mode of monitoring	PM ₁₀ (µg/m ³); NAAQS-100µg/m ³ (24hourly average)					
			1st set of AAQ data (31 days - period 05.12.2014-04.01.2015)		2nd set of AAQ data (37 days - period 05.01.2015-10.02.2015)		Total period of monitoring (68 days - period 05.12.2014-10.02.2015)	
			No. of observation	No. of observation exceeding NAAQS	No. of observation	No. of observation exceeding NAAQS	Total no. of observation	Total no. of observation exceeding NAAQS
Alwar (3)	Rajasthan	Manual	25	25	30	30	55	55
Bharatpur (2)	Rajasthan	Manual	-	-	2	2	2	2
Bhiwadi (2)	Rajasthan	Manual	13	6	-	-	13	6
Delhi (15)	Delhi	Manual & continuous	287	282	258	256	545	538
Faridabad (3)	Haryana	Manual & continuous	18	18	11	11	29	22
Ghaziabad (2)	Uttar Pradesh	Manual	13	13	21	21	34	34
Gurgaon (1)	Haryana	Continuous	27	23	10	8	37	31
Noida (2)	Uttar Pradesh	Manual	12	12	21	21	33	33
Rohtak (1)	Haryana	Continuous	27	17	10	4	37	21

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 24 hourly NAAQS for PM₁₀ for residential, rural, industrial and other area is 100µg/m³

Figure 6: Number of observations and exceedance of PM10 from National Standard (NAAQS 2009) (Average of 68 days - period 05.12.2014-10.02.2015)



iv.) Particulate Matter size less than and equal to 2.5µm (PM_{2.5})

Particulate Matter size less than and equal to 2.5µm (PM_{2.5}) has been monitored only at four cities namely Delhi, Faridabad, Gurgaon and Rohtak. During the monitoring period, it has been observed that the average values of the total monitoring period (68 days period- 05.12.2014-10.02.2015) of PM_{2.5} for all the cities ranged between 59µg/m³ to 205µg/m³ (Table 11, Figure 7). During the total monitoring period for PM_{2.5}, it was observed that all the cities exceeds the NAAQS of 60 µg/m³ (24-hourly averages-Table 11, Figure 8). With respect to number of observations in case of Delhi, 447 observations are exceeding the national standard out of 558 observations. Faridabad indicating 100% exceedances (Refer Table 12).

Table 11: Status of PM_{2.5} in the cities of NCR (68 days period- 05.12.2014-10.02.2015; 24 Hourly NAAQS 2009-60µg/m³)

City	State	Mode of monitoring	Average of PM _{2.5} (µg/m ³)		
			1 st set of AAQ data (31 days - period 05.12.2014-04.01.2015)	2 nd set of AAQ data (37 days - period 05.01.2015-10.02.2015)	Average Value of two sets of AAQ data
Alwar (3)	Rajasthan	Manual	-	-	-
Bharatpur (2)	Rajasthan	Manual	-	-	-
Bhiwadi (2)	Rajasthan	Manual	-	-	-
Delhi (15)	Delhi	Manual & continuous	233	205	205
Faridabad (3)	Haryana	Manual & continuous	237	189	189
Ghaziabad (2)	Uttar Pradesh	Manual	-	-	-
Gurgaon (1)	Haryana	Continuous	-	70	70
Noida (2)	Uttar Pradesh	Manual	-	-	-
Rohtak (1)	Haryana	Continuous	-	59	59

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 24 hourly NAAQS for PM_{2.5} for residential, rural, industrial and other area is 60µg/m³

Figure 7: Particulate Matter PM (PM_{2.5}) concentration in cities under NCR

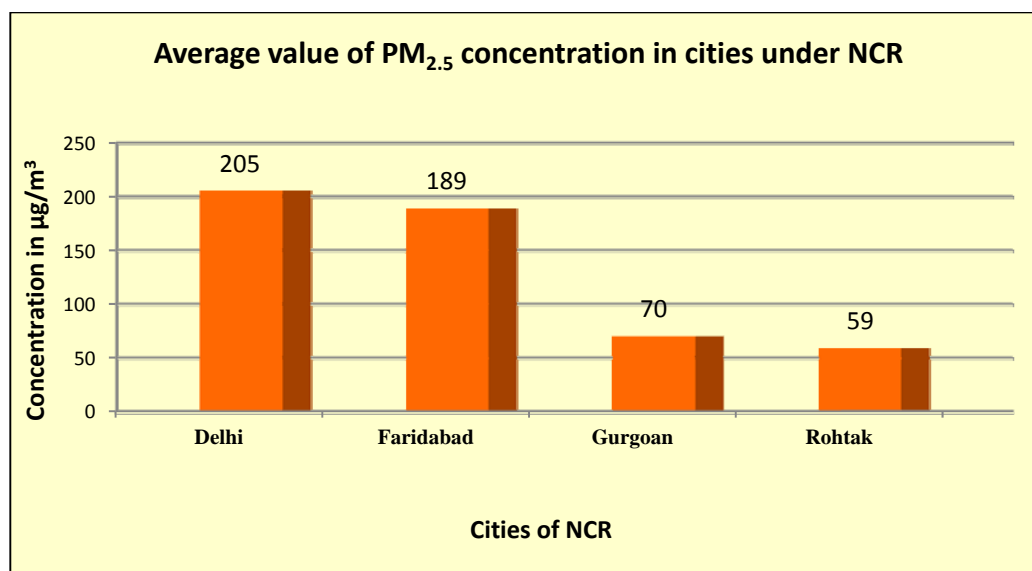
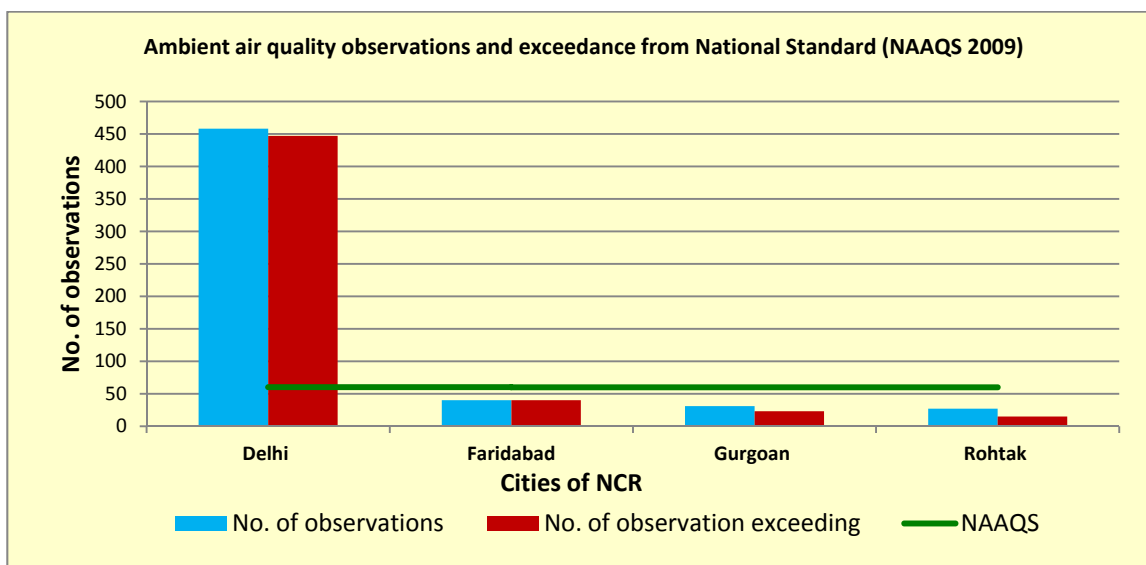


Table 12: Status of PM_{2.5} with no. of exceedences in the cities of NCR w.r.t. National Standard (68 days period -05.12.2014-10.02.2015)

City	State	Mode of monitoring	PM _{2.5} (µg/m ³); NAAQS-60µg/m ³ (24hourly average)					
			1 st set of AAQ data (31 days - period 05.12.2014-04.01.2015)		2 nd set of AAQ data (37 days - period 05.01.2015-10.02.2015)		Total period of monitoring (68 days - period 05.12.2014-10.02.2015)	
			No. of observation	No. of observation exceeding NAAQS	No. of observation	No. of observation exceeding NAAQS	Total no. of observation	Total no. of observation exceeding NAAQS
Alwar (3)	Rajasthan	Manual	-	-	-	-	-	-
Bharatpur (2)	Rajasthan	Manual	-	-	-	-	-	-
Bhiwadi (2)	Rajasthan	Manual	-	-	-	-	-	-
Delhi (15)	Delhi	Manual & continuous	192	191	266	256	458	447
Faridabad (3)	Haryana	Manual & continuous	24	24	16	16	40	40
Ghaziabad (2)	Uttar Pradesh	Manual	-	-	-	-	-	-
Gurgoan (1)	Haryana	Continuous	-	-	31	23	31	23
Noida (2)	Uttar Pradesh	Manual	-	-	-	-	-	-
Rohtak (1)	Haryana	Continuous	-	-	27	15	27	15

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 24 hourly NAAQS for PM_{2.5} for residential, rural, industrial and other area is 60µg/m³

**Figure 8: Observation and exceedance of PM_{2.5} from National Standard (NAAQS 2009)
(Average of 68 days - period 05.12.2014-10.02.2015)**



v.) Ozone (O₃)

Ozone has been monitored only at four cities namely Delhi, Faridabad, Gurgaon and Rohtak. During the monitoring period, it has been observed that the average values of the total monitoring period (68 days period- 05.12.2014-10.02.2015) of O₃ for all the cities ranged between 20µg/m³ to 39µg/m³ (Table 13, Figure 9). During the total monitoring period for O₃, it was observed that all the cities are within the standard of (NAAQS 2009) of 100 µg/m³ (8-hourly averages-Table 14, Figure 10) except for Delhi where 4% of the observations exceeded the National Standard (NAAQS 2009). (Refer Table 14).

**Table 13: Status of O₃ in the cities of NCR
(68 days period- 05.12.2014-10.02.2015; 8 Hourly NAAQS 2009-100µg/m³)**

City	State	Mode of monitoring	Average of O ₃ (µg/m ³)		
			1 st set of AAQ data (31 days - period 05.12.2014- 04.01.2015)	2 nd set of AAQ data (37 days - period 05.01.2015- 10.02.2015)	Average Value of two sets of AAQ data
Alwar (3)	Rajasthan	Manual	-	-	-
Bharatpur (2)	Rajasthan	Manual	-	-	-
Bhiwadi (2)	Rajasthan	Manual	-	-	-
Delhi (15)	Delhi	Manual & continuous	37	41	39
Faridabad (3)	Haryana	Manual & continuous	16	23	20
Ghaziabad (2)	Uttar Pradesh	Manual	-	-	-
Gurgaon (1)	Haryana	Continuous	24	25	25
Noida (2)	Uttar Pradesh	Manual	-	-	-
Rohtak (1)	Haryana	Continuous	-	-	25

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 8 hourly NAAQS for O₃ for residential, rural, industrial and other area is 100µg/m³; '-' Monitoring not conducted

Figure 9: Ozone (O₃) concentration in cities under NCR

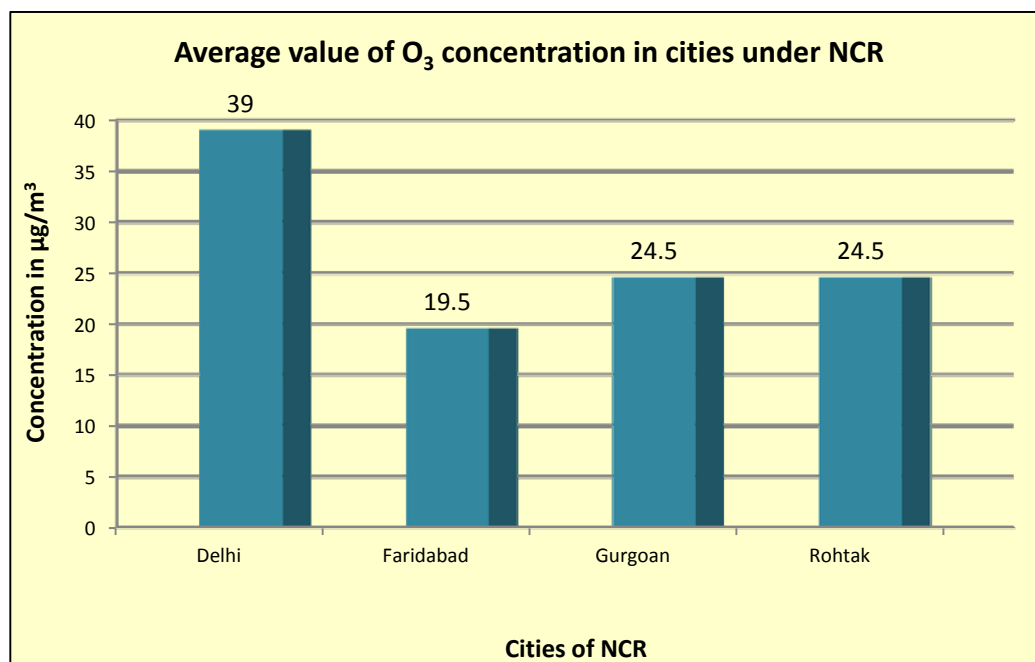
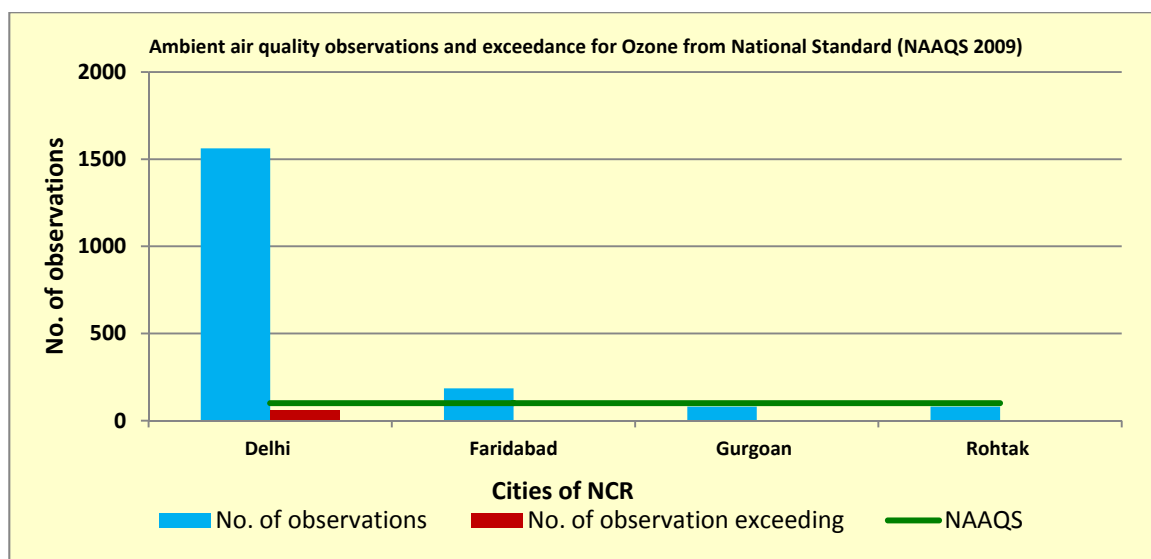


Table 14: Status of O₃ with no. of exceedences in the cities of NCR w.r.t. National Standard (68 days period -05.12.2014-10.02.2015)

City	State	Mode of monitoring	O ₃ (µg/m ³); NAAQS-100µg/m ³ (8 hourly average)					
			1 st set of AAQ data (31 days - period 05.12.2014-04.01.2015)		2 nd set of AAQ data (37 days - period 05.01.2015-10.02.2015)		Total period of monitoring (68 days - period 05.12.2014-10.02.2015)	
			No. of observation	No. of observation exceeding NAAQS	No. of observation	No. of observation exceeding NAAQS	Total no. of observation	Total no. of observation exceeding NAAQS
Alwar (3)	Rajasthan	Manual	-	-	-	-	-	-
Bharatpur (2)	Rajasthan	Manual	-	-	-	-	-	-
Bhiwadi (2)	Rajasthan	Manual	-	-	-	-	-	-
Delhi (15)	Delhi	Manual & continuous	715	34	847	28	1562	62
Faridabad (3)	Haryana	Manual & continuous	93	0	92	0	185	0
Ghaziabad (2)	Uttar Pradesh	Manual	-	-	-	-	-	-
Gurgaon (1)	Haryana	Continuous	81	0	@	@	81	0
Noida (2)	Uttar Pradesh	Manual	-	-	-	-	-	-
Rohtak (1)	Haryana	Continuous	81	0	@	@	81	0

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 8 hourly NAAQS for O₃ for residential, rural, industrial and other area is 100µg/m³; '-' Monitoring not conducted; '@' - data has been received as 24-hourly averages thus not included.

**Figure 10: Observation and exceedance of O3 from National Standard (NAAQS 2009)
(Average of 68 days - period 05.12.2014-10.02.2015)**



vi.) Carbon monoxide (CO)

Carbon monoxide has been monitored only at four cities namely Delhi, Faridabad, Gurgaon and Rohtak. During the monitoring period, it has been observed that the average values of the total monitoring period (68 days period- 05.12.2014-10.02.2015) of CO for all the cities ranged between 0.9 $\mu\text{g}/\text{m}^3$ to 1.8 $\mu\text{g}/\text{m}^3$ (Table 15, Figure 11). During the total monitoring period for CO, it was observed that all the cities exceed the national standard (NAAQS 2009) of 2 mg/m^3 (8-hourly averages-Table 16, Figure 12). Delhi and Faridabad exceeded 28% of the observations from the national standard in (485 observations out of 1725 observations for Delhi and 52 observations out of 185 observations for Faridabad respectively) and Gurgaon and Rohtak exceeded 5% and 7% of the observations from the national standard.

**Table 15: Status of CO in the cities of NCR
(68 days period- 05.12.2014-10.02.2015; 8 Hourly NAAQS 2009-2 mg/m^3)**

City	State	Mode of monitoring	Average of CO (mg/m^3)		
			1 st set of AAQ data (31 days - period 05.12.2014-04.01.2015)	2 nd set of AAQ data (37 days - period 05.01.2015- 10.02.2015)	Average Value of two sets of AAQ data
Alwar (3)	Rajasthan	Manual	-	-	-
Bharatpur (2)	Rajasthan	Manual	-	-	-
Bhiwadi (2)	Rajasthan	Manual	-	-	-
Delhi (15)	Delhi	Manual & continuous	1.5	1.7	1.6
Faridabad (3)	Haryana	Manual & continuous	1.9	1.6	1.8
Ghaziabad (2)	Uttar Pradesh	Manual	-	-	-
Gurgaon (1)	Haryana	Continuous	0.9	0.8	0.9
Noida (2)	Uttar Pradesh	Manual	-	-	-
Rohtak (1)	Haryana	Continuous	1.1	1.0	1.1

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 8 hourly NAAQS for CO for residential, rural, industrial and other area is 2 mg/m^3 ; '-' Monitoring not conducted

Figure 11: Carbon Monoxide (CO) concentration in cities under NCR

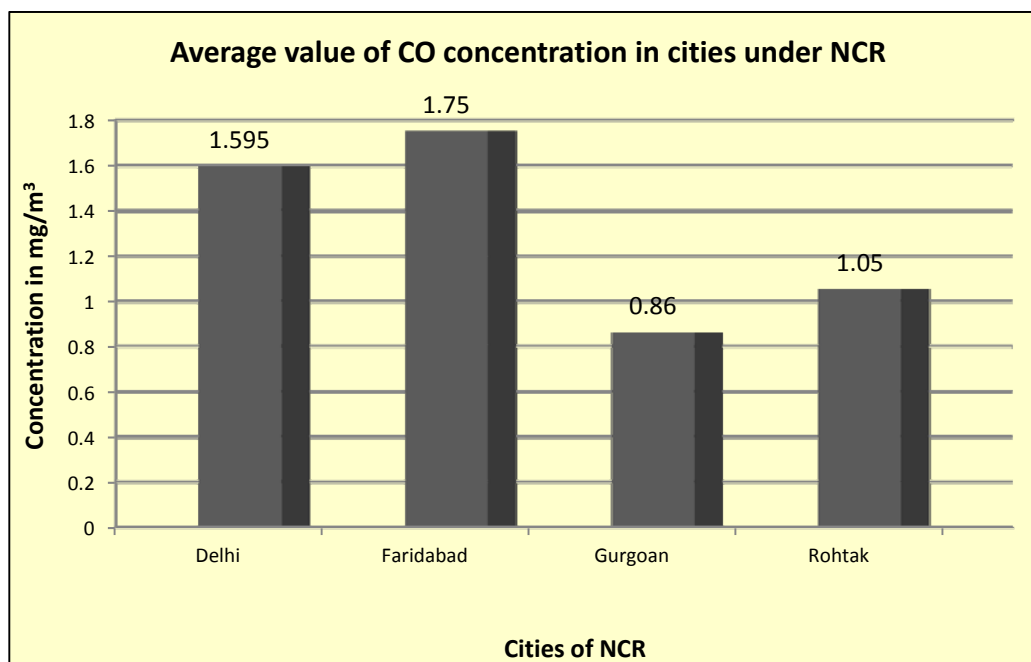
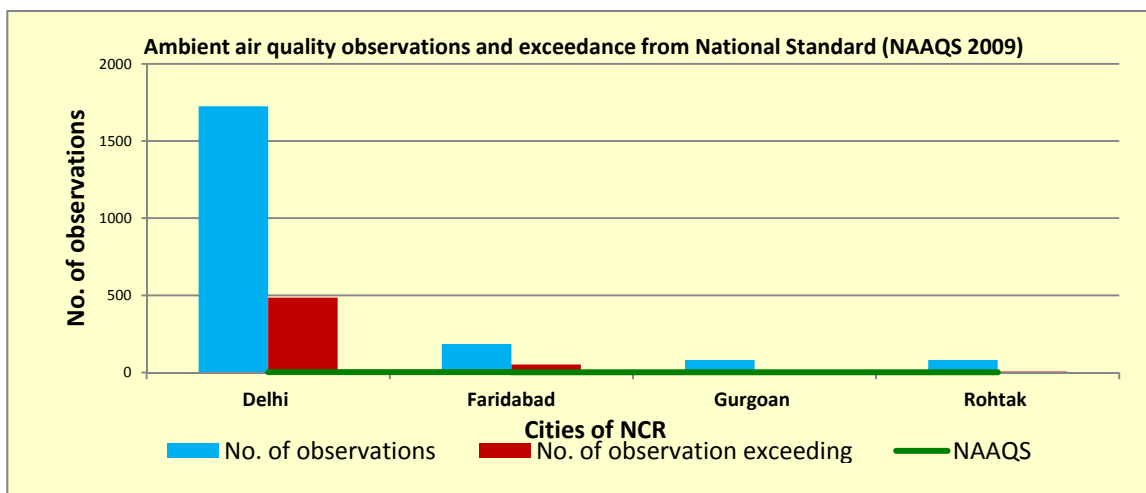


Table 16: Status of CO with no. of exceedences in the cities of NCR w.r.t. National Standard (68 days period -05.12.2014-10.02.2015)

City	State	Mode of monitoring	CO (mg/m ³) NAAQS- 2 mg/m ³ (8 hourly average)					
			1 st set of AAQ data (31 days - period 05.12.2014-04.01.2015)		2 nd set of AAQ data (37 days - period 05.01.2015-10.02.2015)		Total period of monitoring (68 days - period 05.12.2014-10.02.2015)	
			No. of observation	No. of observation exceeding NAAQS	No. of observation	No. of observation exceeding NAAQS	Total no. of observation	Total no. of observation exceeding NAAQS
Alwar (3)	Rajasthan	Manual	-	-	-	-	-	-
Bharatpur	Rajasthan	Manual	-	-	-	-	-	-
Bhiwadi (2)	Rajasthan	Manual	-	-	-	-	-	-
Delhi (15)	Delhi	Manual & continuous	787	243	938	242	1725	485
Faridabad (3)	Haryana	Manual & continuous	92	34	93	18	185	52
Ghaziabad (2)	Uttar Pradesh	Manual	-	-	-	-	-	-
Gurgoan (1)	Haryana	Continuous	81	4	@	@	81	4
Noida (2)	Uttar Pradesh	Manual	-	-	-	-	-	-
Rohtak (1)	Haryana	Continuous	81	6	@	@	81	6

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 8 hourly NAAQS for CO for residential, rural, industrial and other area is 2mg/m³; '-' Monitoring not conducted; @ - data has been received as 24-hourly averages thus not included.

**Figure 12: Observation and exceedance of CO from National Standard (NAAQS 2009)
(Average of 68 days - period 05.12.2014-10.02.2015)**



vii.) Ammonia (NH₃)

Ammonia has been monitored only at six locations in Delhi only. During the monitoring period, it has been observed that the average value of the total monitoring period (68 days period-05.12.2014-10.02.2015) of NH₃ for all the locations ranged between 31µg/m³ to 72µg/m³ (Table 17, Figure 13). During the total monitoring period for NH₃, it was observed that all the locations of Delhi are within the national standard (NAAQS 2009) of 400 µg/m³ (24-hourly averages-Table 18).

**Table 17: Status of NH₃ in the cities of NCR
(68 days period- 05.12.2014-10.02.2015; 24 Hourly NAAQS 2009-400µg/m³)**

City	Location	Mode of monitoring	Average of NH ₃ (µg/m ³)		
			1 st set of AAQ data (31 days - period 05.12.2014- 04.01.2015)	2 nd set of AAQ data (37 days - period 05.01.2015-10.02.2015)	Average Value of two sets of AAQ data
Delhi	R K Puram	Continuous, DPCC	51	37	44
Delhi	Punjabi Bagh	Continuous, DPCC	108	36	72
Delhi	Mandir Marg	Continuous, DPCC	78	37	58
Delhi	AnandVihar	Continuous, DPCC	42	37	40
Delhi	Civil Lines	Continuous, DPCC	52	37	45
Delhi	IGI Airport	Continuous, DPCC	24	37	31
DELHI TOTAL			59	37	48

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 24 hourly NAAQS for NH₃ for residential, rural, industrial and other area is 400µg/m³; '-' Monitoring not conducted

Figure 13: Ammonia (NH₃) concentration in cities under NCR

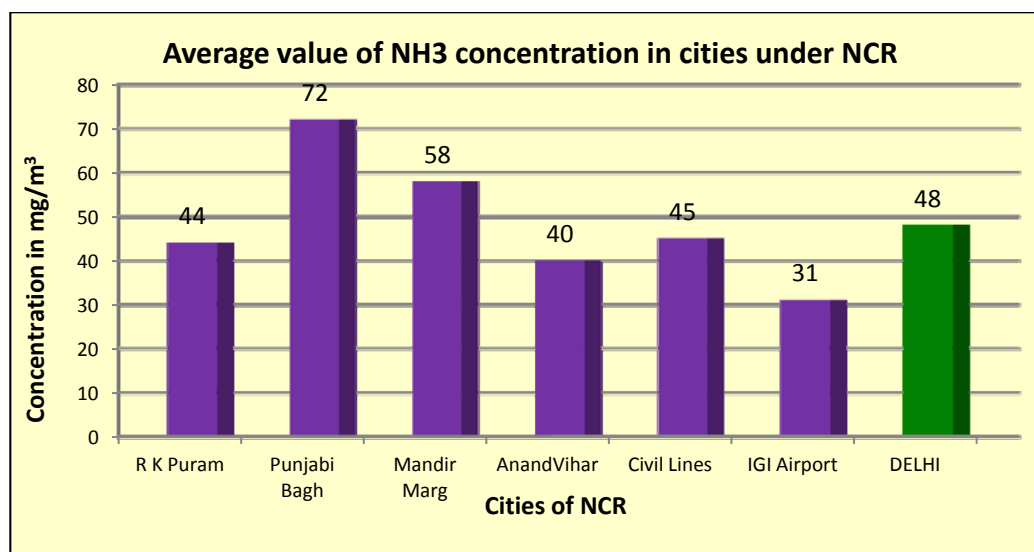


Table 18: Status of NH₃ with no. of exceedences in the cities of NCR w.r.t. National Standard (68 days period -05.12.2014-10.02.2015)

City	State	Mode of monitoring	NH ₃ (µg/m ³); NAAQS- 400 µg/m ³ (24 hourly average)					
			1 st set of AAQ data (31 days - period 05.12.2014- 04.01.2015)		2 nd set of AAQ data (37 days - period 05.01.2015- 10.02.2015)		Total period of monitoring (68 days - period 05.12.2014- 10.02.2015)	
			No. of observation	No. of observation exceeding NAAQS	No. of observation	No. of observation exceeding NAAQS	Total no. of observation	Total no. of observation exceeding NAAQS
Delhi	R K Puram	Continuous, DPCC	29	0	49	0	78	0
Delhi	Punjabi Bagh	Continuous, DPCC	31	0	76	0	107	0
Delhi	Mandir Marg	Continuous, DPCC	31	0	66	0	97	0
Delhi	AnandVihar	Continuous, DPCC	31	0	64	0	95	0
Delhi	Civil Lines	Continuous, DPCC	29	0	40	0	69	0
Delhi	IGI Airport	Continuous, DPCC	30	0	20	0	50	0
Delhi Total			181	0	315	0	496	0

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 24 hourly NAAQS for NH₃ for residential, rural, industrial and other area is 400µg/m³; '-' Monitoring not conducted

viii.) Benzene (C₆H₆)

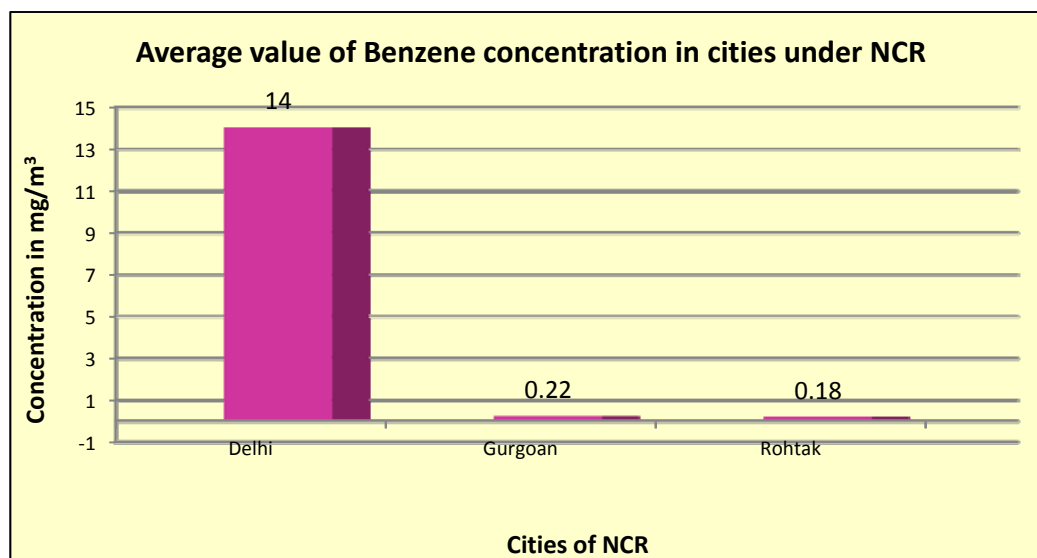
The monitoring observations of benzene (C₆H₆) could not be compared with the national standard as the national standard (NAAQS 2009) for benzene is annual i.e. 5µg/m³. However, the monitoring data during the period is attached in the Table 19. Benzene has been monitored only at three cities namely Delhi, Gurgaon and Rohtak. During the monitoring period, it has been observed that the average value of the total monitoring period (68 days period- 05.12.2014-10.02.2015) of benzene (C₆H₆) ranged between 0.18µg/m³ to 14µg/m³ (Table 19, Figure 14).

**Table 19: Status of Benzene (C₆H₆) in the cities of NCR
(68 days period- 05.12.2014-10.02.2015; Annual NAAQS 2009-5µg/m³)**

City	State	Mode of monitoring	Average of Benzene (µg/m ³)		
			1 st set of AAQ data (31 days - period 05.12.2014- 04.01.2015)	2 nd set of AAQ data (37 days - period 05.01.2015-10.02.2015)	Average Value of two sets of AAQ data
Alwar (3)	Rajasthan	Manual	-	-	-
Bharatpur (2)	Rajasthan	Manual	-	-	-
Bhiwadi (2)	Rajasthan	Manual	-	-	-
Delhi (15)	Delhi	Manual & continuous	14	14	14
Faridabad (3)	Haryana	Manual & continuous	-	-	-
Ghaziabad (2)	Uttar Pradesh	Manual	-	-	-
Gurgoan (1)	Haryana	Continuous	0.22	-	0.22
Noida (2)	Uttar Pradesh	Manual	-	-	-
Rohtak (1)	Haryana	Continuous	0.18	-	0.18

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the annual NAAQS for C₆H₆ for residential, rural, industrial and other area is 5µg/m³; '-' Monitoring not conducted

Figure 14: Benzene (C₆H₆) concentration in cities under NCR



7.0 EXISTING AMBIENT AIR QUALITY MONITORING NETWORK IN NCR UNDER NAMP & SNAPSHOT (ONE TIME) MONITORING AT FIVE LOCATIONS IN NCR

Some of the cities not covered in regular monitoring in NCR were monitored for one day as per minutes of the meeting dated 26/12/2014 held at CPCB. The cities were Dharuhera, Hissar, Panipat and Sonapat in Haryana and Hapur in Uttar Pradesh. Three parameters namely PM₁₀, NO₂ and SO₂ were monitored in this snapshot monitoring during the first set of monitoring (December 2014 to January 2015). The existing operating Ambient Air Quality monitoring network of NCR under National Network (NAMP) is given in Table 20 and one time monitoring -Snap shot is given in Table 21.

The monitoring data shows that with respect to SO₂, the one day 24 hour average value was minimum in Panipat, Haryana (3 µg/m³) and maximum in Sonapat, Haryana (17 µg/m³). With respect to NO₂ the one day 24 hour average value was minimum in Panipat, Haryana (16 µg/m³) and maximum in Hapur, Uttar Pradesh (45 µg/m³). With respect to PM₁₀ the one day 24 hour average value was minimum in Hissar, Haryana (79 µg/m³) and maximum in Sonapat, Haryana (793 µg/m³), Refer Table 21 Figure 15.

Table 20: Existing Ambient Air Quality Network of NCR under National Network (NAMP)

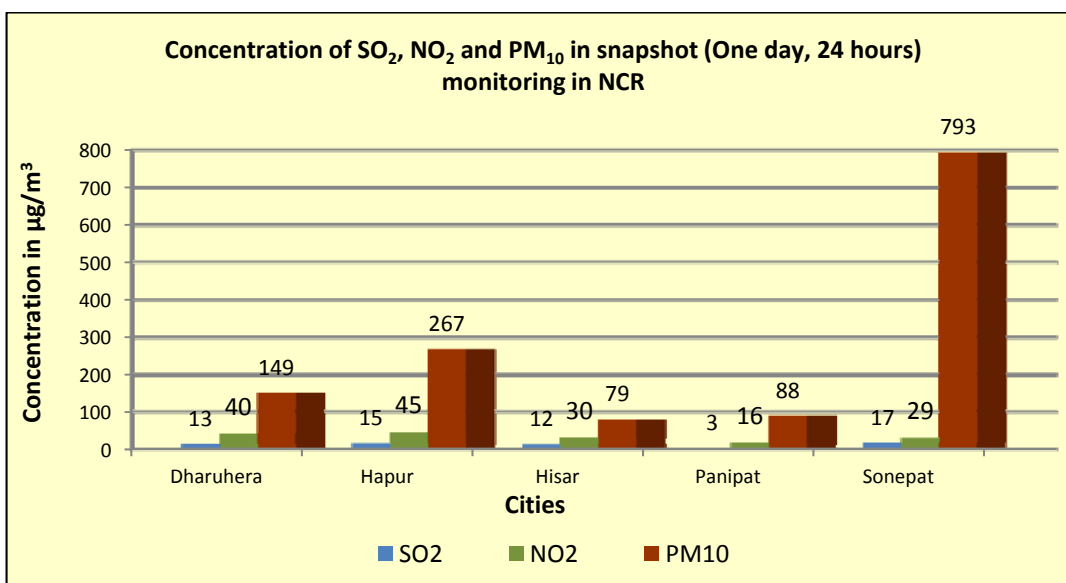
S. No.	Name of state	Name of city	Location	Number of Stations
1	Delhi	Delhi	Nizamuddin	10
2	Delhi	Delhi	ShahzadaBagh	
3	Delhi	Delhi	Shahadra	
4	Delhi	Delhi	Janakpuri	
5	Delhi	Delhi	Siri Fort	
6	Delhi	Delhi	N.Y. SCHOOL	
7	Delhi	Delhi	Town Hall	
8	Delhi	Delhi	Mayapuri Industrial Area	
9	Delhi	Delhi	Pritampura	
10	Delhi	Delhi	ITO	
11	Haryana	Faridabad	Regional Office, HSPCB	2
12	Haryana	Faridabad	Shivalic Global Industries	
13	Uttar Pradesh	Ghaziabad	M/s Atlas Cycles	2
14	Uttar Pradesh	Ghaziabad	Bulandshaar Road Industrial Area	
15	Uttar Pradesh	Noida	Gee-Pee Engineering Works	2
16	Uttar Pradesh	Noida	Regional Office, UPPCB	
17	Uttar Pradesh	Meerut	Begum Bridge	2
18	Uttar Pradesh	Meerut	Thana Railway Road	
19	Rajasthan	Alwar	RILCO Pump House	3
20	Rajasthan	Alwar	Regional Office	
21	Rajasthan	Alwar	Gaurav Solvex Ltd	
			Total	21

**Table 21: Status of Air Quality w.r.t. SO₂, NO₂ and PM₁₀ in the cities of NCR
(Average of 1 day period- 24 hours- One time monitoring -Snapshot)**

City	State	Mode of monitoring	Concentration in $\mu\text{g}/\text{m}^3$ (24 Hourly NAAQS 2009 for PM ₁₀ , NO ₂ , SO ₂ is 100 $\mu\text{g}/\text{m}^3$, 80 $\mu\text{g}/\text{m}^3$, 80 $\mu\text{g}/\text{m}^3$ respectively)		
			SO ₂	NO ₂	PM ₁₀
Dharuhera (1)	Haryana	One time	13	40	149
Hapur (2)	Uttar Pradesh	One time	15	45	267
Hissar (1)	Haryana	One time	12	30	79
Panipat (2)	Haryana	One time	3	16	88
Sonepat (1)	Haryana	One time	17	29	793

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city; the 24 hourly NAAQS for PM₁₀, NO₂, SO₂ for residential, rural, industrial and other area is 100 $\mu\text{g}/\text{m}^3$, 80 $\mu\text{g}/\text{m}^3$, 80 $\mu\text{g}/\text{m}^3$ respectively;

Figure 15: Concentration of SO₂, NO₂& PM₁₀ in remaining cities of NCR



8.0 ANALYSIS OF AMBIENT AIR QUALITY DATA FOR PEAK HOURS AND NON PEAK HOURS AS PER THE HON'BLE TRIBUNAL ORDER

The available data of ambient air quality during 05th December 2014 to 4th January 2015 is in discrete series and therefore, interpretation of receipt data to link with the peak and non peak hours in Delhi & NCR is not possible presently. The ambient air quality for peak and non-peak hours data compiled for three cities such as Delhi, Gurgaon and Rohtak is given in Table 22 & 23. The peak and non-peak hours interpretation for ambient air quality data could be linked with meteorological conditions as the period of monitoring is winter months. During the winter months, in the lower atmosphere the temperature (inversion) is very low and due to obvious reason mixing height is also very low and pollutants could not be dispersed. Therefore, data especially for peak hours in the evening time indicating higher concentration of NO₂, PM₁₀ and CO (mostly vehicular related parameters) in the lower atmosphere.

Table 22: Status of ambient air quality during peak hours and non-peak hours in Delhi & NCR (05th December 2014 to 04th January 2015)

Locations	Time	SO ₂ µg/m ³	NO ₂ µg/m ³	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	CO mg/m ³	O ₃ µg/m ³	NH ₃ µg/m ³	C ₆ H ₆ µg/m ³
Delhi (06)	07-10 (Peak Hr Morning)	13	77	377	208	1.58	36	59	15.56
	11-02(non-peak hr)	18	76	402	219	1.37	77	57	15.03
	05-08 (Peak Hr Evening)	13	108	442	242	2.57	33	59	19.02
Rohtak (01)	07-10 (Peak Hr Morning)	4	34	102	-	1.23	19	-	-
	11-02(non-peak hr)	4	31	106	-	0.84	48	-	-
	05-08 (Peak Hr Evening)	3	39	99	-	1.3	32	-	-
Gurgaon (01)	07-10 (Peak Hr Morning)	3	32	111	-	0.91	22	-	-
	11-02(non-peak hr)	4	35	120	-	0.84	48	-	-
	05-08 (Peak Hr Evening)	4	40	107	-	1.47	30	-	-

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city. '-' data not available. All values are in µg/m³ except CO, the concentration of CO is in mg/m³

Table 23: Status of ambient air quality during peak hours and non-peak hours in Delhi & NCR (05th January 2015 to 10th February 2015)

Locations	Time	SO ₂ µg/m ³	NO ₂ µg/m ³	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	CO mg/m ³	O ₃ µg/m ³	NH ₃ µg/m ³	C ₆ H ₆ µg/m ³
Delhi (06)	07-10 (Peak Hr Morning)	15	67	308	216	2	32	53	14
	11-02(non-peak hr)	16	61	299	189	1	73	48	13
	05-08 (Peak Hr Evening)	14	92	354	215	2	27	56	17
Rohtak (01)	07-10 (Peak Hr Morning)	-	-	-	-	-	-	-	-
	11-02(non-peak hr)	-	-	-	-	-	-	-	-
	05-08 (Peak Hr Evening)	-	-	-	-	-	-	-	-
Gurgaon (01)	07-10 (Peak Hr Morning)	-	-	-	-	-	-	-	-
	11-02(non-peak hr)	-	-	-	-	-	-	-	-
	05-08 (Peak Hr Evening)	-	-	-	-	-	-	-	-

Note: Figures in parentheses are the number of monitoring stations (manual & continuous) in the city. '-' data not available. All values are in µg/m³ except CO, the concentration of CO is in mg/m³, "-" data has been received as 24-hourly averages thus not included.

9.0 AMBIENT AIR QUALITY MONITORING AT NCT BORDERS

The ambient air quality monitoring for two days (16.02.2015 & 17.02.2015) in the borders of NCT of Delhi (Table 24) showing exceedance of 24-hourly national standards with respect to SO₂, NO₂, PM₁₀ and PM_{2.5}. The data shows that SO₂ and NO₂ are within the 24-hourly National Standard (NAAQS 2009) of 80 µg/m³ in all the borders of NCT of Delhi during the two days of monitoring. With respect to PM₁₀ and PM_{2.5} all the borders exceeds the 24-hourly National Standard (NAAQS 2009) of 100 µg/m³ and 60 µg/m³ respectively except for Badarpur Border (Delhi-Faridabad ie Delhi Haryana Border) which is within the National Standard..

Table 24: Status of ambient air quality at the borders of NCT of Delhi (16th – 17th January 2015)

Sampling Date	Name of Monitoring Station	City / Border	Monitoring Agency	Concentration in µg/m ³ (24 Hourly NAAQS 2009 for PM _{2.5} , PM ₁₀ , NO ₂ , SO ₂ is 60 100, 80, 80µg/m ³ respectively)			
				SO ₂	NO ₂	PM ₁₀	PM _{2.5}
16.02.15 &17.02.15 2 days average	Near D.P.S School Village Achheja Hapur	Hapur (Delhi-UP border)	U.P.P.C.B. GZB	7	24	240	-
16.02.2015	PAC Ghaziabad Vaishali Near- NH24, 700 maters approx from the UP, Delhi border	Ghaziabad (Delhi- UP border)	Enviro International	12	23	155	114
17.02.2015	PAC Ghaziabad Vaishali Near- NH24, 700 maters approx from the UP,Delhi border	Ghaziabad (Delhi- UP border)	Enviro International	11	18	158	158
2 days average				12	21	157	136
16.02.2015	AIPL Apsara border GT road, 1km approx from the UP,Delhi border	Ghaziabad (Delhi- UP border)	Enviro International	12	23	148	105
17.02.2015	AIPL Apsara border GT road, 1km approx from the UP,Delhi border	Ghaziabad (Delhi- UP border)	Enviro International	12	23	161	120
2 days average				12	23	155	113
16.02.2015	Sector-1, Noida	Near Expressway (Delhi-UP border)	M/s Enviro International, Greater Noida	12	24	159	114
17.02.2015	Sector-1, Noida	Near Expressway (Delhi-UP border)	M/s Enviro International, Greater Noida	12	24	155	109
2 days average				12	24	157	111
16.02.2015	Pari Chowk, Greater Noida	Near Expressway (Delhi-UP border)	M/s Enviro International, Greater Noida	13	24	152	105
17.02.2015	Pari Chowk, Greater Noida	Near Expressway (Delhi-UP border)	M/s Enviro International, Greater Noida	12	23	146	117
2 days average				13	23	149	111
16.02.2015	Delhi-Sonepat Border	(Delhi-Haryana border)	Micro Engineering & Testing Lab.	5	4	342	242
17.02.2015	Delhi-Sonepat Border	(Delhi-Haryana border)	Micro Engineering & Testing Lab.	5	4	345	242
2 days average				5	4	343	242
16.02.2015	Bahadurgarh	Near Tikri Border (Delhi-Haryana border)	RO Bahadurgarh HSPCB	14	33	327	88
17.02.2015	Bahadurgarh	Near Tikri Border (Delhi-Haryana border)	RO Bahadurgarh HSPCB	13	32	345	96

		border)					
2 days average				13	33	336	92
16.02.2015	near Sirhaul toll barrier	industrial area near NH8 (Delhi-Haryana border)	HSPCB	7	28	163	83
17.02.2015	near Sirhaul toll barrier	industrial area near NH8 (Delhi-Haryana border)	HSPCB	6	30	178	109
2 days average				7	29	171	96
16.02.2015	Delhi - Faridabad Badarpur Border	Terrace of Company (Delhi-Haryana border)	Polymer Papers Limited 12/6 Mathura Road Faridabad.	69	57	71	43
17.02.2015	Delhi -Faridabad Badarpur Border	Terrace of Company (Delhi-Haryana border)	Polymer Papers Limited 12/6 Mathura Road Faridabad.	69	56	71	43
2 days average				69	57	71	43

NB. '-' data not received

10.0 CONCLUSION

Since there is an inconsistency in the data received from different stakeholders, it is difficult to come out with concrete conclusions. Furthermore, most of the State Pollution Control Boards has not provided data in the desired format of CPCB and in most of the cases the data provided by SPCBs/PCCs as 24 hourly averaged values could not help us to work out peak hours and non-peak hour's concentration of pollutants to establish pollution from vehicular sectors. However, in order to get a statistically acceptable data, a monitoring of ambient air quality is required as per the National Standard (NAAQS) as well as to come out with more scientifically acceptable conclusions. However, comparison of the data (68 days monitoring, border monitoring and snapshot monitoring) has been made with 24 hourly/ 8 hourly averages of NAAQS. Moreover, the yearly annual average data generated under NAMP has been compiled and the trend analysis for three years (2011-2013) is given at **Annexure II**. The summary of the 24-hourly / snapshot monitoring is given below:

10.1) Sulphur dioxide (SO₂): Ambient air quality data of 16 cities for *Sulphur dioxide (SO₂)* reveals that all the cities are within the 24-hourly NAAQS of 80 µg/m³ in all the monitoring days;

10.2) Nitrogen dioxide (NO₂): Analysis of the ambient air quality data of 16 cities for *Nitrogen dioxide (NO₂)* reveals that all the cities are within the 24-hourly NAAQS of 80 µg/m³ except for Delhi and Faridabad.

10.3) Particulate Matter size less than and equal to 10µm (PM₁₀): Ambient air quality data of 16 cities for *Particulate Matter size less than and equal to 10µm (PM₁₀)* reveals that all the cities exceeded the 24-hourly NAAQS of 100 µg/m³ in most of the monitoring days.

10.4) Particulate Matter size less than and equal to 2.5µm (PM_{2.5}): Particulate Matter size less than and equal to 2.5µm (PM_{2.5}) has been monitored only at four cities namely Delhi, Faridabad, Gurgaon and Rohtak. Analysis of ambient air quality data revealed that all the cities exceeds the NAAQS of 60 µg/m³ (24-hourly averages).

10.5) Ozone (O₃): Ozone has been monitored only at four cities namely Delhi, Faridabad, Gurgaon and Rohtak. During the total monitoring period for O₃, it was observed that all the cities are within the standard of (NAAQS 2009) of 100 µg/m³ (8-hourly averages) except for Delhi.

10.6) Carbon monoxide (CO): Carbon monoxide has been monitored only at four cities namely Delhi, Faridabad, Gurgaon and Rohtak. During the total monitoring period for CO, it was observed that all the cities exceed the national standard (NAAQS 2009) of 2mg/m³ (8-hourly averages).

10.7) Ammonia (NH₃): Ammonia has been monitored only at six locations in Delhi only. It was observed that all the locations of Delhi are within the national standard (NAAQS 2009) of 400 µg/m³ (24-hourly average).

10.8) Benzene (C₆H₆): Benzene has been monitored only at three cities namely Delhi, Gurgaon and Rohtak. It has been observed that the average value of the total monitoring period (68 days period- 05.12.2014-10.02.2015) of benzene (C₆H₆) ranged between 0.18µg/m³ to 14µg/m³. The monitoring observations of benzene (C₆H₆) could not be compared with the national standard as the national standard (NAAQS 2009) for benzene is annual i.e. 5µg/m³.

NB. Data for Delhi (Second set of data, Period: 5th January – 10th February, 2015) by CPCB (3 stations) has been received on 23rd February, 2015. Hence, the parameters SO₂, NO₂, PM₁₀, PM_{2.5}, C₆H₆ could not be inserted in the text / report. However, these data sets have been attached in Annexure I.

Details of Appendix I:

Appendix IA	1 st set of AAQ data (31 days - period 05.12.2014-04.01.2015)
1.	Alwar, Rajasthan - SO ₂ , NO ₂ , PM ₁₀
2.	Bhiwadi, Rajasthan - SO ₂ , NO ₂ , PM ₁₀
3.	Faridabad, Haryana - SO ₂ , NO ₂ , PM ₁₀ ; Faridabad - PM _{2.5} ; Faridabad - CO
4.	Noida, Uttar Pradesh - SO ₂ , NO ₂ , PM ₁₀
5.	Ghaziabad, Uttar Pradesh - SO ₂ , NO ₂ , PM ₁₀
6.	Gurgaon, Haryana: SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , CO & O ₃
7.	Rohtak, Haryana: SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , CO & O ₃
8.	Delhi: SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , CO, O ₃ , C ₆ H ₆ , NH ₃ SO ₂ of Delhi; NO ₂ of Delhi; PM ₁₀ of Delhi, PM _{2.5} of Delhi, O ₃ of Delhi; CO of Delhi; NH ₃ of Delhi; C ₆ H ₆ of Delhi
Appendix IB	2 nd set of AAQ data (37 days - period 05.01.2015-10.02.2015)
1.	Alwar, Rajasthan - SO ₂ , NO ₂ , PM ₁₀
2.	Bharatpur, Rajasthan:- SO ₂ , NO ₂ , PM ₁₀
3.	Rohtak, Haryana - SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , CO & O ₃ MDU, Rohtak;
4.	Faridabad, Haryana - SO ₂ , NO ₂ , PM ₁₀ & PM _{2.5}
5.	Ghaziabad, Uttar Pradesh - SO ₂ , NO ₂ , PM ₁₀
6.	Gurgaon, Haryana - SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , CO & O ₃
7.	Noida Uttar Pradesh - SO ₂ , NO ₂ , PM ₁₀
8.	Delhi: SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , CO, O ₃ , C ₆ H ₆ , NH ₃ A. SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , CO, O ₃ , C ₆ H ₆ , NH ₃ BY DPCC B. SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , CO, O ₃ , C ₆ H ₆ , NH ₃ BY CPCB; Delhi: SO₂, NO₂, PM₁₀ ; Delhi: CO & O ₃

Details of Appendix II: Ambient Air Quality Trend Analysis of NCR Region under National Ambient Air Quality Monitoring Programme (NAMP) during 2011 to 2013

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1st set of AAQ data
(31 days - period 05.12.2014-04.01.2015)

Alwar, Rajasthan: SO₂, NO₂, PM₁₀ of 31 days - period 05.12.2014-04.01.2015

Sampling Date	Monitoring Station	Type Of Location	SO ₂	SO ₂	SO ₂	SO ₂	SO ₂	SO ₂	24 hourly average	NO ₂	NO ₂	NO ₂	NO ₂	NO ₂	NO ₂	24 hourly average	PM ₁₀	PM ₁₀	PM ₁₀	24 hourly average
06.12.2014	GAURAV SOLVEX LTD	IND	20	14.5	14.4	15.2	10.9	12.7	15	26.8	22.2	27.5	19.7	24.4	21.1	24	152	271	301	241
10.12.2014	GAURAV SOLVEX LTD	IND	12.7	14.2	PF	17.4	17.8	23.6	17	17.7	18.4	PF	17	18.4	15.5	17	687	677	99	488
13.12.2014	GAURAV SOLVEX LTD	IND	13	18.2	14	11.4	12.4	12.4	14	19.3	22.2	26.8	22.1	24.9	27.1	24	202	209	264	225
20.12.2014	GAURAV SOLVEX LTD	IND	14.2	14.5	14	18.2	12.4	12.2	14	18.4	21.1	19.5	21.1	17.3	14.8	19	159	284	325	256
24.12.2014	GAURAV SOLVEX LTD	IND	19	19.6	13.7	19	12.2	10.9	16	19.7	20.6	19	23.2	23.3	18.8	21	503	177	132	271
27.12.2014	GAURAV SOLVEX LTD	IND	18.2	14.5	20.5	11.2	19.6	12.4	16	21.1	25.5	21.3	22.7	17.3	18.4	21	268	204	210	227
31.12.2014	GAURAV SOLVEX LTD	IND	15.2	18.2	12.4	19.6	14.2	18.2	16	18.6	21.1	18.4	21.7	18.4	22.2	20	102	559	242	301
03-01-2015	GAURAV SOLVEX LTD	IND	7.1	10.9	16	11.4	7.1	12.6	11	17.3	15.5	14.6	22.1	17.3	18	17	186	292	257	245
08.12.2014	R.O.BUILDING	RES	13	22.2	14.5	14.5	22.2	12.2	16	18.2	15.5	15.5	21.1	18.4	17.3	18	184	297	574	352
11.12.2014	R.O.BUILDING	RES	10.7	7.1	7.1	14.5	5.3	10.9	9	15.2	15.2	14.1	18.8	17.3	18.8	17	330	272	268	290
15.12.2014	R.O.BUILDING	RES	13.3	7.3	14.5	7.3	10.7	12.4	11	21.7	14.4	18.8	15.5	15.2	17.3	17	112	96	523	244
18.12.2014	R.O.BUILDING	RES	7.3	13.9	10.7	12.7	17.8	14.5	13	17.7	18	15.2	17.7	18.4	15.5	17	255	305	335	298
19.12.2014	R.O.BUILDING	RES	10.9	12.2	14.5	10.9	12.4	5.5	11	17.7	18	15.5	17.7	14.1	17.7	17	458	213	252	308
22.12.2014	R.O.BUILDING	RES	14.2	12.7	10.7	7.1	12.4	13.9	12	18.4	17.7	15.2	17.3	15.2	13.8	16	172	272	203	216
25.12.2014	R.O.BUILDING	RES	12.7	10.9	14.5	17.8	12.4	10.9	13	18.8	17.7	13.3	18.4	17.3	15.5	17	350	147	435	311
29.12.2014	R.O.BUILDING	RES	14.5	10.9	12.7	5.3	7.1	12.4	10	18.8	13.3	17.7	14.1	15.2	17.3	16	235	351	356	314
01-01-2015	R.O.BUILDING	RES	5.5	7.1	14.9	10.9	14.2	13.3	11	17.7	18.4	22.7	15.5	24.9	19.7	20	269	179	518	322
05.12.2014	RIICO PUMP HOUSE	IND.	12.7	10.9	15.2	7.3	10.7	12.7	12	22.2	24.4	23.2	25.5	18.4	21.1	22	284	296	331	304
09.12.2014	RIICO PUMP HOUSE	IND.	17.8	19.6	16	20.5	12.7	19.1	18	18.4	20.6	19.5	19.3	17.7	21.2	19	325	228	307	287
12.12.2014	RIICO PUMP HOUSE	IND.	16	12.2	11.7	12.7	10.7	10.9	12	19.5	17	20.2	17.7	20.6	22.2	20	92	213	232	179
16.12.2014	RIICO PUMP HOUSE	IND.	15.6	12.7	20	11.2	17.4	12.7	15	19	17.7	17.1	14.7	12.7	18.8	17	107	221	178	169
23.12.2014	RIICO PUMP HOUSE	IND.	16.4	10.9	14.7	17.4	14.2	13	14	21.3	21.1	21.8	21.2	17.3	25	21	97	188	137	141
26.12.2014	RIICO PUMP HOUSE	IND.	13.7	14.5	17.8	14.2	19.6	14.9	16	22.6	22.2	17.3	20.6	18.4	22.7	21	104	366	111	194
30.12.2014	RIICO PUMP HOUSE	IND.	14.5	7.3	16	18.2	19.6	14.2	15	18.8	22.2	19.5	21.1	27.1	23.8	22	272	271	148	230
02-01-2015	RIICO PUMP HOUSE	IND.	10	14.5	13	7.8	19.1	12.7	13	25.9	22.2	18.5	26.2	20.1	15.5	21	195	281	211	229

Bhiwadi, Rajasthan SO₂, NO₂, PM₁₀ of 31 days - period 05.12.2014-04.01.2015

Sampling Date	Monitoring Station	Type Of Location	City	SO ₂	SO ₂	SO ₂	SO ₂	SO ₂	SO ₂		NO ₂	NO ₂	NO ₂	NO ₂	NO ₂	NO ₂		RSPM	RSPM	RSPM	
29-12-2014	Regional Office building	IND.	Bhiwadi			7	7.6	13.9	12	10			18	18.6	21.2	28	21		295	458	377
30-12-2014	Regional Office building	IND.	Bhiwadi	14.5	10.4	15.2	18.6	15.2	14.7	15	24.4	26.5	16.3	19.3	23.3	30	23	267	410	363	347
31-12-2014	Regional Office building	IND.	Bhiwadi	16	14.5	12	13.3	20	16.4	15	24.4	28.8	17.1	15.1	31.7	25	24	232	506	640	459
01-01-2015	Regional Office building	IND.	Bhiwadi	11.4	16	21	5.7	10.7	18.6	14	22.1	17.1	19.7	13.9	21.7	19	19	717	384	564	555
02-01-2015	Regional Office building	IND.	Bhiwadi	14.9	13.3	7.8	13	11.4	5.5	11	10.2	26.7	20.2	15.9	18.6	13	17	78	167	267	171
03-01-2015	Regional Office building	IND.	Bhiwadi	7.6	12	5.6	7.4	16	17.8	11	13.9	17.1	18.2	19.3	22.3	19	18	319	422	166	302
29-12-2014	UIT Guest House	RES	Bhiwadi			14	10.9	14.5	20	14.8			19.5	21.1	22.2	28.8	22.9		331	350	340
30-12-2014	UIT Guest House	RES	Bhiwadi	14.5	24.4	18.2	15.2	27	25.5	20.8	32.2	23	15.5	23.2	24.4	27.7	24.3	171	390	370	310
31-12-2014	UIT Guest House	RES	Bhiwadi	14.9	20.5	15.2	11.4	18.6	22	17.1	15.9	19.3	23.2	22.1	13.6	23.2	19.5	183	454	527	388
01-01-2015	UIT Guest House	RES	Bhiwadi	14.9	11.4	18.6	24.9	14.9	21	17.6	19.3	18.6	26.1	31.4	22.7	30.2	24.7	685	760	740	728
02-01-2015	UIT Guest House	RES	Bhiwadi	14	7.8	12.3	18.6	14.9	21	14.7	26.8	30.9	21.3	32.9	19.3	30.2	26.9	123	155	150	142
03-01-2015	UIT Guest House	RES	Bhiwadi	18.6	16	11.7	21.5	24.4	21.1	18.6	32.9	12.2	16.7	22.6	27.1	21.8	22.2	160	357	214	243

Faridabad, Haryana - (SO₂, NO₂, PM₁₀ of 31 days - period 05.12.2014-04.01.2015)

Sampling Date	Monitoring Station	City	SO ₂ AM_0AM	SO ₂ M_2P	SO ₂ PM_6P	SO ₂ PM_10	SO ₂ M_2A	SO ₂ M_6A		NO ₂ M_10AM	NO ₂ M_2P	NO ₂ PM_6	NO ₂ PM_10	NO ₂ PM_2A	NO ₂ M_6A		RSP M_6AM_2PM	RSP M_2PM_10	RSP M_10PM_6AM	
05.12.2014	M/s Escorts Research centre,Mathura Road	Faridabad	11	13	18	20	7	5	12.33	21	24	28	31	17	15	22.67	120	208	116	148
10.12.2014	M/s Escorts Research centre,Mathura Road	Faridabad	9	15	16	19	8	7	12.33	18	20	25	28	14	11	19.33	110	203	108	140.3
12.12.2014	M/s Escorts Research centre,Mathura Road	Faridabad	14	18	15	21	10	8	14.33	20	22	24	26	16	14	20.33	118	198	116	144
17.12.2014	M/s Escorts Research centre,Mathura Road	Faridabad	11	13	17	19	7	6	12.17	22	24	28	30	15	13	22	120	214	116	150
19.12.2014	M/s Escorts Research centre,Mathura Road	Faridabad	10	14	18	22	8	5	12.83	25	28	30	33	18	16	25	122	205	112	146.3
24.12.2014	M/s Escorts Research centre,Mathura Road	Faridabad	11	13	14	18	9	7	12	24	26	29	31	20.0	18	24.67	124	230	122	158.7
31.12.2014	M/s Escorts Research centre,Mathura Road	Faridabad	10	14	16	20	8	6	12.33	26	28	31	34	22	20	26.83	112	214	110	145.3
04.12.2014	Haryana RO SPCB Sector-16A	Faridabad	7	10	12	15	4	5	8.833	15	17	18	24	13	12	16.5	108	184	104	132
06.12.2014	Haryana RO SPCB Sector-16A	Faridabad	9	12	14	18	6	8	11.17	13	18	20	25	11	10	16.17	117	158	115	130
09.12.2014	Haryana RO SPCB Sector-16A	Faridabad	8	10	13	16	8	5	10	24	26	28	30	22	20	25	120	192	116	142.7
11.12.2014	Haryana RO SPCB Sector-16A	Faridabad	8	13	15	18	7	8	11.5	20	24	26	29	18	16	22.17	115	155	112	127.3
13.12.2014	Haryana RO SPCB Sector-16A	Faridabad	10	12	15	17	6	3	10.5	18	20	25	30	16	14	20.5	106	148	104	119.3
16.12.2014	Haryana RO SPCB Sector-16A	Faridabad	11	14	16	21	8	7	12.83	20	24	26	31	18	16	22.5	120	166	118	134.7
18.12.2014	Haryana RO SPCB Sector-16A	Faridabad	10	12	15	19	10	8	12.33	23	25	24	29	20	19	23.33	114	158	112	128
20.12.2014	Haryana RO SPCB Sector-16A	Faridabad	8	10	14	16	7	5	10	21	19	26	28	19	17	21.67	110	175	106	130.3
23.12.2014	Haryana RO SPCB Sector-16A	Faridabad	7	12	13	18	8	6	10.67	24	26	28	30	20	18	24.33	117	184	114	138.3
27.12.2014	Haryana RO SPCB Sector-16A	Faridabad	9	11	14	20	6	4	10.67	18	22	24	26	14	12	19.33	120	176	116	137.3
30.12.2014	Haryana RO SPCB Sector-16A	Faridabad	10	13	16	21	7	6	12.17	23	26	24	29	20	18	23.33	115	185	110	136.7

PM2.5 Faridabad

00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00		11:00		13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	avg
205	199	177	144	131	111	116	136	163	179	166	151	139	78	94	88	102	84	115	180	153	157	163	158	141.21
163	182	165	178	154	164	162	182	160	152	136	117	119	93	102	97	108	113	167	165	148	140	131	117	142.29
117	139	137	123	146	133	136	160	160	213	314	245	Maint	223	259	223	222	222	283	265	275	289	307	301	212.7
301	344	366	364	409	324	287	288	323	338	500	540	504	493	483	525	502	526	541	467	388	401	408	396	417.42
396	382	387	271	269	161	225	135	125	158	Maint	188	157	138	96	104	81	123	167	170	173	190	185	176	193.78
195	188	165	211	156	141	163	197	256	284	245	248	300	342	336.0	312	276	281	372	380	417	360	392	390	275.29
313	320	343	331	296	250	237	170	170		188	185	206	215	204	197	197	Mainte	233	232	215	195	184	187	230.36
####	136	145	127	119	129	134	138	132	165	146	139	137	121	122	131	161	192	246	293	353	####	533	419	202.92
349	360	352	391	400	370	377	409	390	399	391	380	380	283	271	354	354	310	277	273	277	249	253	235	336.83
256	226	218	208	173	167	159	PF	PF	PF	150	138	154	154	154	Maint	Mainte	219	223	274	254	226	246	211	200.53
211	211	181	165	149	129	133	136	149	146	152	165	151	143	142	143	136	118	134	PF	PF	PF	PF	PF	152.32
PF	PF	PF	PF	PF	PF	PF	PF	PF	157	145	164	137	74	87	80	81	195	230	235	286	276	327	418	192.8
469	372	440	416	425	446	342	486	446	559	635	511	411	241	172	491	573	537	524	568	604	585	473	458	466
458	371	259	199	165	151	174	187	167	226	309	356	539	236	92	66	65	261	358	265	239	279	311	337	252.92
375	357	291	279	287	271	266	279	300	286	Maint	199	248	184	286	219	111	132	169	284	310	361	338	285	265.96
192	120	141	106	100	87	86	82	82	102	98	105	111	114	119	116	113								110.24

CO Faridabad

00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	8-hour averag	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00		16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	avg
0.8	0.9	0.8	0.7	0.7	0.7	0.8	1	0.8	1	1.2	1	1	0.6	0.6	0.5	0.4	0.7625	0.5	1	1.6	1.9	1.8	1.6	1.3	1	1.325
0.8	0.7	0.6	0.7	0.7	0.8	0.7	0.8	0.725	0.9	0.8	0.3	1	0.6	0.4	0.5	0.6	0.6125	0.8	1	1.9	2.1	1.7	1.3	1.2	1	1.425
0.9	0.8	0.8	0.7	0.7	0.8	0.9	1.1	0.8375	1.1	1	0.7	1	0.7	0.7	0.7	0.6	0.7625	0.7	1	2	2.2	1.6	1.7	1.5	1	1.5
0.8	0.7	0.8	0.7	0.7	0.7	0.9	1	0.7875	1.1	1	0.9	1	0.9	0.7	0.7	0.6	0.8125	0.6	2	2.6	2.5	2.7	2.9	3.5	2	2.3125
1.9	1.8	1.9	1.7	1.3	1.2	1.4	1.8	1.625	2.2	1.8	1.1	1	0.5	0.6	0.8	0.9	1.0875	0.8	2	3.1	3.8	3.8	3	2.9	2.6	2.7
2.7	2.8	2.6	2.1	1.6	1.2	1.3	1.5	1.975	1.6	1.2	1	1	0.6	0.6	0.6	0.6	0.875	0.7	1	1.7	1.7	1.7	1.4	1.3	1	1.325
0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.8875	0.9	0.8	0.6	1	0.6	0.6	0.5	0.4	0.625	0.5	1	1.4	1.6	1.5	1.5	1.4	1	1.2125
####	0.8	0.8	0.7	0.7	0.7	0.9	1.1	0.825	1.3	1.3	0.9	1	0.5	0.6	0.6	0.7	0.8	0.9	2	2.7	####	4.1	4.4	5	4	3.275
4.5	3.9	3.4	3.4	3	4.6	4	4.5	3.9125	5.2	5	2.4	2	1.2	0.9	0.5	0.4	2.1375	0.8	2	4.1	6	4.9	4.1	4.4	4.2	3.8375
3.8	3.1	3.1	3.2	2.5	1.9	2	2.2	2.725	2.3	1.9	1.1	1	0.8	0.7	0.6	0.6	1.1	0.7	1	2	3.4	2.9	2.3	2.4	1.8	2.0625
1.5	1.2	1.3	1.1	1	0.9	1.1	1.3	1.175	1.4	1.2	1	PF	1.3	0.9	PF	PF	1.16	PF	PF	2.1	2.2	2.4	2.6	2.5	2.2	2.3375
2.2	2	1.7	1.6	1.5	1.4	1.4	1.7	1.6875	1.9	1.9	1.8	1	1.1	1	1.3	1.1	1.425	1.4	2	3.3	5.4	6.9	8.3	5.4	4.6	4.7
2.5	1.7	1.6	1.3	1.3	1.3	1.4	1.4	1.5625	1.4	1.4	1.3	1	1.3	1.3	1.3	1	1.275	1.1	1	1	0.9	0.8	0.7	0.7	0.7	0.8625
0.7	0.7	0.6	0.5	0.5	0.5	0.6	0.7	0.6	0.8	0.8	0.9	1	1	1	1	1	0.925	1.1	1	1.2	1.3	1	1.2	1.1	0.8	1.1125
0.6	0.5	0.5	0.4	0.4	0.5	0.5	0.7	0.5125	0.8	0.7	0.8	1	0.8	0.9	1	1.1	0.85	1	1	1.4	2.2	2.1	2.1	2	1.6	1.675
1.3	1	0.9	0.9	0.8	0.8	0.9	1.2	0.975	1.2	1	0.9	1	cali	cali	0.7	0.8	0.8667	0.6	1	2	1.9	1.6	1.4	1.1	1.2	1.3375
####	1.1	1	1	1	1	1.1	1.2	1.075	1.2	1.2	1	1	1	0.9	0.8	0.6	0.95	0.6	1	1.4	####	1.4	1.2	1.1	1	1.1375
0.9	0.9	0.8	0.9	0.9	0.9	1	1.2	0.9375	1.5	1.7	1.4	1	1.7	1.8	1.7	1.6	1.6	1.6	2	2.5	3.3	3.6	4	4	3.8	3.1125
3.5	3.3	2.8	2.3	1.9	1.8	1.7	1.7	2.375	2.1	2.2	2.6	3	2.2	2.2	2.1	2.3	2.275	2.7	4	3.2	2.5	2.6	3.4	3.7	3.4	3.125
3.1	3.4	2.2	1.3	1	1.1	0.9	1.1	1.7625	1.3	1.6	1	1	1.2	1.3	1.1	1.2	1.225	1	1	1.7	1.7	1.8	1.8	1.9	1.7	1.625
1.6	1.4	1.3	1.2	1.1	1	1.1	1.1	1.225	1.2	1.3	1.2	1	1.2	1.2	1.2	1.2	1.2	1.2	2	2.5	3.1	3.4	3.2	3.8	2.4	2.65
2.3	2.3	2.4	2.5	2.5	2.5	2.1	1.9	2.3125	2.2	2.3	1.9	2	2	2	2	2	2.0125	2.1	2	2.7	2.5	2.2	2	2	1.8	2.1875
1.6	1.4	1.3	1.2	1.3	1.5	1.6	1.7	1.45	1.7	1.5	1.4	1	1.5	1.4	1.3	1.3	1.425	1.5	2	3.2	4.5	5.2	6.9	7.2	5.8	4.55
4.4	4.5	4.1	4.8	4.9	4.4	4.7	4.8	4.575	4.2	3.7	3.3	3	2.8	2.3	2.3	2.8	3.0375	2.5	2	2.4	2.5	2.8	2.5	2.5	2.3	2.45
2.2	1.9	1.8	1.6	1.5	1.5	1.5	PF	1.7143	PF	PF	1.7	2	1.6	1.7	1.6	1.7	1.65	1.6	2	2.3	2.6	2.5	2.2	2.6	2.3	2.225
####	1.6	1.5	1.4	1.3	1.2	1.1	1.2	1.4125	1.3	1.6	1.6	1	1.2	1.3	1.2	1.3	1.3625	1.2	1	1.7	PF	PF	PF	PF	PF	1.3375
PF	PF	PF	PF	PF	PF	PF	PF		PF	1.4	1.4	1	0.8	0.9	1	0.9	1.0857	1.7	2	3.2	4.3	4.2	4.8	6.3	6.7	4.2
7.5	5.2	6.6	5.8	5.4	5.2	4.6	6.5	5.85	6.9	6.1	5.9	4	3.1	1.9	1.6	3.1	4.1125	4	4	5.5	6.1	7.1	6.9	5.7	5.5	5.65
5.2	5.8	3.6	2.2	1.9	1.7	1.9	2.1	3.05	2.2	2.5	2.7	3	3.5	1.9	1	1	2.2	1.2	3	4.2	4.1	3.7	4.4	4.7	5.8	3.8625
5.8	4.8	3.1	2.9	3	2.8	2.7	2.8	3.4875	3.1	2.6	2	3	1.9	2.3	1.8	1.1	2.2	1.4	2	4.4	3.3	3.5	3.5	3.2	2.9	3.025
1.7	1.5	1.2	0.9	0.9	0.9	1	1	1.1375	1.2	1	0.9	1	1.2	1.3	1.3	1.3	1.1375	1.4	2	3	3.8	4.8	6.8	7.4	7.3	4.55

Noida, Uttar Pradesh - SO₂, NO₂, PM₁₀ (31 days - period 05.12.2014-04.01.2015)

Sampling Date	Monitoring Station	Area	SO ₂	SO ₂	SO ₂	SO ₂	SO ₂	SO ₂	24 hrly ave.SO ₂	NO ₂	NO ₂	NO ₂	NO ₂	NO ₂	NO ₂	24 hrly ave. NO ₂	RSPM	RSPM	RSPM	24 hrly ave. RSPM
09.12.2014	Sector-1	R	7	9	7	9	11	7	8.3333	21	28	34	38	24	18	27.167	136	148	125	136.33
11.12.2014	Sector-1	R	10	6	9	8	12	5	8.3333	37	27	31	24	33	23	29.167	125	137	119	127
16.12.2014	Sector-1	R	8	10	6	7	6	7	7.3333	31	19	18	37	27	18	25	148	145	152	148.33
18.12.2014	Sector-1	R	10	5	7	9	9	6	7.6667	18	23	21	26	38	22	24.667	155	139	124	139.33
26.12.2014	Sector-1	R	10	7	9	6	8	9	8.1667	25	19	40	27	44	29	30.667	152	157	147	152
29.12.2014	Sector-1	R	8	11	7	9	12	7	9	28	21	29	34.0	24	18	25.667	143	160	132	145
08.12.2014	Sector-6	I	9	7	8	10	10	7	8.5	25	32	29	35	35	21	29.5	147	164	135	148.67
10.12.2014	Sector-6	I	12	10	9	11	10	6	9.6667	32	33	35	29	23	18	28.333	158	172	142	157.33
15.12.2014	Sector-6	I	6	8	10	8	7	5	7.3333	16	24	23	21	19	25	21.333	126	143	124	131
17.12.2014	Sector-6	I	12	10	7	10	13	5	9.5	30	32	18	26	34	22	27	148	167	139	151.33
22.12.2014	Sector-6	I	9	13	10	8	7	6	8.8333	38	35	22	30	33	27	30.833	164	182	169	171.67
24.12.2014	Sector-6	I	13	8	10	7	11	10	9.8333	31	33	38	45	41	26	35.667	155	163	146	154.67

Ghaziabad , Uttar Pradesh - SO2, NO2, PM10 (31 days - period 05.12.2014-04.01.2015)

Sampling Date	Name of Monitoring Station	SO2	SO2	SO2	SO2	S O 2	S O 2	24 hrly ave.SO2	NO2	NO2	NO2	NO2	N O 2	N O 2	24 hrly ave. NO2	RSPM	RSPM	R S P M	24 hrly ave. RSPM
		4 hrly							4 hrly							8 hrly			
05.12.14	Sahibabad Industrial Area	20	22	25	24			22.75	31	33	41	37			35.5	258	278		268
09.12.14	Sahibabad Industrial Area	21	23	25	22			22.75	33	36	41	34			36	281	311		296
12.12.14	Sahibabad Industrial Area	21	25	25	23			23.5	34	39	38	33			36	314	282		298
16.12.14	Sahibabad Industrial Area	20	24	25	24			23.25	34.0	39	41	36			37.5	268	344		306
19.12.14	Sahibabad Industrial Area	22	24	26	28			25	35	37	41	46			39.75	308	327		317.5
26.12.14	Sahibabad Industrial Area	21	25	27	23			24	36	43	42	33			38.5	265	299		282
30.12.14	Sahibabad Industrial Area	22	24	25	23			23.5	31	34	39	39			35.75	241	277		259
08.12.14	B.S. Road Industrial Area	19	22	26	25			23	31	36	43	39			37.25	254	289		271.5
11.12.14	B.S. Road Industrial Area	20	22	24	23			22.25	31	34	38	36			34.75	216	263		239.5
15.12.14	B.S. Road Industrial Area	21	23	25	22			22.75	33	36	39	35			35.75	257	305		281
18.12.14	B.S. Road Industrial Area	19	23	24	22			22	29	32	38	36			33.75	259	294		276.5
22.12.14	B.S. Road Industrial Area	22	24	26	21			23.25	31	37	42	34			36	244	305		274.5
29.12.14	B.S. Road Industrial Area	21	22	28	25			24	33	37	43	39			38	199	232		215.5

Gurgaon, Haryana: SO₂, NO₂, PM₁₀, PM_{2.5}, CO & O₃

Date	SO ₂ µg/m ³	NO ₂ µg/m ³	PM ₁₀ µg/m ³	CO mg/m ³	O ₃ µg/m ³	Benzene µg/m ³
05-12-2014	2.09	51.84	145.02	1.42	26.33	0.18
06-12-2014	4.76	42.03	88.45	0.91	26.62	0.30
07-12-2014	4.72	49.73	81.07	0.88	22.69	0.36
08-12-2014	2.83	55.68	127.95	1.37	29.16	0.27
09-12-2014	2.05	49.57	131.40	1.60	29.36	0.16
10-12-2014	3.18	42.65	109.41	0.91	30.76	0.21
11-12-2014	3.49	43.53	108.96	1.04	25.67	0.13
12-12-2014	4.00	34.30	111.00	1.51	34.29	0.26
13-12-2014	3.75	34.09	114.56	0.88	21.37	0.22
14-12-2014	3.55	33.09	99.24	0.75	15.87	0.20
15-12-2014	4.60	43.60	106.34	0.72	22.72	0.28
16-12-2014	4.14	45.76	107.47	0.59	24.95	0.27
17-12-2014	3.73	37.43	119.77	0.54	20.01	0.13
18-12-2014	3.37	28.45	117.12	1.04	22.82	0.23
19-12-2014	3.59	21.56	104.41	0.64	17.64	0.26
20-12-2014	3.51	20.41	98.07	1.04	21.06	0.25
21-12-2014	3.29	28.87	112.27	1.24	22.62	0.20
22-12-2014	3.30	24.28	113.54	0.85	21.52	0.20
23-12-2014	4.18	38.29	119.93	0.89	25.73	0.21
24-12-2014	4.15	25.43	103.15	0.81	24.72	0.21
25-12-2014	3.62	19.37	123.49	0.65	18.91	0.24
26-12-2014	2.86	23.87	113.27	0.86	25.07	0.08
27-12-2014	3.20	26.86	122.39	0.87	22.55	0.22
28-12-2014	4.52	26.91	121.47	1.21	33.42	0.24
29-12-2014	3.96	22.82	105.40	0.60	24.62	0.33
30-12-2014						

Rohtak, Haryana: SO₂, NO₂, PM₁₀, PM_{2.5}, CO & O₃, (MDU, Rohtak)

Date	SO ₂ µg/m ³	NO ₂ µg/m ³	PM ₁₀ µg/m ³	CO mg/m ³	O ₃ µg/m ³	Benzene µg/m ³
05-12-2014	2.29	29.23	117.02	2.85	24.75	0.28
06-12-2014	3.18	29.65	102.94	1.35	28.03	0.26
07-12-2014	3.49	21.87	109.29	2.14	20.81	0.08
08-12-2014	3.16	27.92	99.18	1.32	30.39	0.22
09-12-2014	3.83	47.97	100.01	1.46	26.16	0.25
10-12-2014	3.95	30.90	115.06	0.97	23.75	0.22
11-12-2014	3.95	62.23	96.34	0.53	39.47	0.10
12-12-2014	3.48	62.87	103.30	0.57	24.06	0.22
13-12-2014	2.76	49.08	105.20	0.79	23.74	0.15
14-12-2014	3.81	56.06	95.28	1.06	23.84	0.14
15-12-2014	3.35	57.10	111.36	1.04	17.81	0.21
16-12-2014	2.80	63.51	113.44	1.05	15.42	0.27
17-12-2014	2.80	20.06	101.92	0.71	20.02	0.16
18-12-2014	2.13	30.88	93.06	0.80	26.08	0.20
19-12-2014	3.57	37.63	106.59	0.95	23.12	0.19
20-12-2014	2.47	25.02	92.44	0.67	25.41	0.14
21-12-2014	3.04	32.53	94.91	0.96	23.70	0.20
22-12-2014	3.30	21.20	107.51	0.68	24.27	0.13
23-12-2014	3.76	31.03	111.59	0.61	22.21	0.15
24-12-2014	4.04	19.05	112.29	0.37	32.58	0.25
25-12-2014	3.42	25.71	90.87	1.08	23.08	0.21
26-12-2014	2.79	36.75	101.53	1.01	25.65	0.21
27-12-2014	3.35	37.36	99.90	0.85	23.52	0.11
28-12-2014	3.38	28.70	93.36	0.76	23.99	0.18
29-12-2014	3.73	26.86	107.19	0.85	20.40	0.16
30-12-2014						
31-12-2014						
AVERAGE	3	36	103	1	24	

DELHI: SO2, NO2, PM10, PM2.5, CO, O3, C6H6, NH3

SO2 of Delhi: 1 st set of AAQ data (31 days - period 05.12.2014-04.01.2015)															
Time\Date	R K Puram	Punjabi Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport	DMS, Shadipur	IHBAS	NSIT	Pitampura	Sirifort	Janakpuri	Nizamuddin	Shahzada Bagh	Shahdara
5-Dec	22	8	18	19	20	24	9	25	22			4			4
6-Dec	17	6	8	12	16	17	14	8	16						
7-Dec	20	6	9	12	16	17	16	10	19						
8-Dec	22	52	10	18	12	16	15	14	15	4			4		
9-Dec	23	16	16	22	16	38	17	22	12		4			4	
10-Dec	18	16	12	16	12	20	11	11	4			4			4
11-Dec	21	15	13	16	16	19	15	11	7	4			4		
12-Dec	24	23	16	28	17	33	31	20	8		4			4	
13-Dec	17	5	10	18	25	13	4	18	4						
14-Dec	11	4	4	11	3	2	4	5	4						
15-Dec	17	4	6	14	6	10	11	12	5			4			4
16-Dec	11	4	4	13	8	11	8	5	6	4			4		
17-Dec	12	3	6	14	6		8	11	5		4			4	
18-Dec	14	4	8	15	6	10	14	11	5			4			4
19-Dec	14	8	7	16	6	15	16	16	7	4			4		
20-Dec	12	13	6	14	5	6	4	8	3						
21-Dec	14	4	7	30	11	13	10	15	9						
22-Dec	13	32	10	15	7	9	10	22	10		4			4	
23-Dec	12	8	9	16	6	10	8	20	2			4			4
24-Dec	6		8	11	3	11	5	9	5				4		
25-Dec	4	3	3	10	2	7	5	7	3						
26-Dec	6	6	3	15	4	5	5	8	3		4			4	
27-Dec	18	16	10	14	6	14	12	10	12						
28-Dec	13	4	8	16	3	13	3	11	28						
4-Jan	12	11	7	15	7	11	4	8	3			4			4
30-Dec	13	22	7	24	4	12	9	7	6	4			4		
31-Dec	18	21	11	23	8	11	6	13	7						
1-Jan	25	40	22	52	23	28	12	17	22						
2-Jan	10	17	7	22	8	14	2	4	7						
3-Jan	12	17	5	24		8	6	10	5						
4-Jan	12	39	3	17		6	3		9						

NO2 of Delhi: 1st set of AAQ data (31 days - period 05.12.2014-04.01.2015)

Time\Date	R K Puram	Punjabi Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport	DMS, Shadipur	IHBAS	NSIT	Pitampura	Sirifort	Janakpuri	Nizamuddin	Shahzada Bagh	Shahdara
12/5/2014	74	238	190	20	58	116	*	31	63			49			52
12/6/2014	65	232	137	16	55	78	*	23	60						
12/7/2014	53	181	99	10	47	75	*	20	63						
12/8/2014	61	240	129	13	53	97	*	20	59	40			45		
12/9/2014	74	367	281	8	69	131	*	21	103		36			59	
12/10/2014	68	230	133	4	46	110	*	19	59			47			48
12/11/2014	61	179	138	51	56	88	*	19	76	39			49		
12/12/2014	69	213	196	89	58	155	*	19	107		43			57	
12/13/2014		159	162	57	45	62	*	18	43						
12/14/2014		61	65	37	27	33	*	17	31						
12/15/2014	51	93	76	47	27	48	*	19	39			42			55
12/16/2014	32	110	90	51	50	22	*	*	44	36			41		
12/17/2014	29	101	68	56	38		57	19	42		45			61	
12/18/2014	30	122	96	57	41	82	59	19	40			47			47
12/19/2014	36	132	127	56	39	83	58	19	42	34			42		
12/20/2014	28	75	78	53	32	40	40	17	29						
12/21/2014	48	61	118	51	38	78	51	*	57						
12/22/2014	48	206	151	57	42	71	46	18	77		46			62	
12/23/2014	45	212	118	56	46	72	58	19	73			47			63
12/24/2014	49	116	151	57	41	75	39	18	42				40		
12/25/2014	33	84	75	60	32	45	27	18	38						
12/26/2014	40	88	72	58	38	48	35	19	57		46			59	
12/27/2014	60	134	137	50	46	97	56	19	49						
12/28/2014	70	146	203	16	40	115	52	19	57						
12/29/2014	65	144	145	16	52	84	52	18	66			41			51
12/30/2014	71	140	160	11	44	106	48	17	55	31			44		
12/31/2014	64	120	99	78	40	64	45	18	56						
1/1/2015	128	218	178	164	46	152	70	19	82						
1/2/2015	74	106	174	85	43	71	23	19	44						
1/3/2015	55	70	75	83		50	23	10	26						
1/4/2015	44	60	58	77		41	16		37						

PM10 of Delhi: 1st set of AAQ data (31 days - period 05.12.2014-04.01.2015)

Time\Date	R K Puram	Punjabi Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport	DMS, Shadipur	IHBAS	NSIT	Pitampura	Sirifort	Janakpuri	Nizamuddin	Shahzada Bagh	Shahdara
12/5/2014	400	367	223	916			236	144	293			235			289
12/6/2014	297	278	189	622			257	128	241						
12/7/2014	273	231	162	605	404		267	139	302						
12/8/2014	383	313	172	637	648		261	170	311	189			343		
12/9/2014	516	511	279	656	641		275	205	334		218			221	
12/10/2014	387	318	185	650	433		244	139	346			215			546
12/11/2014	444	313	208	710	453		264	153	372	228			237		
12/12/2014	563	471	263	933	571		339	165	337					290	
12/13/2014	370	369	265	460	512		223	191	213		302				
12/14/2014	89	106	79	111	149		209	82	205						
12/15/2014	125	120	78	236			243	100	239			187			211
12/16/2014	215	228	155	470			232	112	243	229			158		
12/17/2014	237	260	185	475		247	229	126	216		191			287	
12/18/2014	328	346	270	534		346	259	195	231			311			444
12/19/2014	537	532	399	781		604	271	245	260	382			251		
12/20/2014	272	251	215	436		354	211	144	178						
12/21/2014	287	276	382	597		414	240	233	306						
12/22/2014	477	566	398	574		628	238	225	345		224			479	
12/23/2014	468	500	548	585	733	475	233	225	347			195			514
12/24/2014	544	526	829	948	660	566	216	214	346				257		
12/25/2014	334	370	282	510	547	375	218	160	189						
12/26/2014	306	324	246	483	460	322	217	161	280		229			481	
12/27/2014	266	524	334	647	579	346	248	250	282						
12/28/2014	680	624	531	936	516	692	210	225	365						
12/29/2014	414	426	375	933	537	326	212	202	328			143			432
12/30/2014	561	549	377	719	615	534	236	153	306	309			214		
12/31/2014	377	434	247	364	445	351	221	164	239						
1/1/2015	715	771	385	719	587	624	250	237	422						
1/2/2015	213	304	232	117	371	480	208	205	283						
1/3/2015	152	175	119	174		297	222	161	294						
1/4/2015	185	230	167	307		347	213		210						

PM2.5 of Delhi: 1st set of AAQ data (31 days - period 05.12.2014-04.01.2015)

Time\Date	R K Puram	Punjabi Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport	DMS, Shadipur	IHBAS	NSIT	Pitampura	Sirifort	Janakpuri	Nizamuddin	Shahzada Bagh	Shahdara
12/5/2014	193	216	178	315								104			146
12/6/2014	152	161	149	218											
12/7/2014	140	128	121	188											
12/8/2014	161	168	131	359											
12/9/2014	273	306	230	390						125	97			117	
12/10/2014	208	183	146	259	222										83
12/11/2014	214	178	161	261	210					111					
12/12/2014	278	261	218	410	312						150			114	
12/13/2014	230	210	205	226	345										
12/14/2014	64	75	68	87	85										
12/15/2014	83	72	65	102	71							113			108
12/16/2014	135	148	136	178	211					75					
12/17/2014	151	171	162	210	190	49					189			85	
12/18/2014	220	236	238	318	261	85						70			132
12/19/2014	351	356	329	475	308	109				85					
12/20/2014	185	168	178	222	240	86									
12/21/2014	310	181	323	392	308	92									
12/22/2014	328	389	357	420	479	124					77			108	
12/23/2014	336	285	272	379	300	100						119			117
12/24/2014	390	353	419	631	455	127									
12/25/2014	230	245	248	315	269	91									
12/26/2014	203	211	216	619	232	69					140				
12/27/2014	316	328	299	464	343	71									
12/28/2014	481	421	464	657	358	152									
12/29/2014	280	267	258	475	334	95						109			96
12/30/2014	388	339	325	429	376	126				99					
12/31/2014	279	243	192	1284	277	96									
1/1/2015	475	421	343	439	405	157									
1/2/2015	145	200	209	100	538	184									
1/3/2015	112	116	101	136		181									
1/4/2015	138	150	139	168		166									

O3 of Delhi: 1st set of AAQ data (31 days - period 05.12.2014-04.01.2015)

Time\Date		5-Dec	6-Dec	7-Dec	8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec	1-Jan	2-Jan	3-Jan	4-Jan		
R K Puram	12.00-07.00	11	8	4	6	10	9	16	26	34	24		6	5	9	4	5	5	1	5	4	7	8	1	1	2	2	2	10	14	8	13		
	8.00-15.00	73	87	79	75	68	40	85	33	44	17	47	40	48	43	23	35	16	10	20	7	34	38	61	26	23	29	29	11	9	8	11		
	16.00-23.00	18	17	19	22	18	35	43	64	28	22	15	15	19	15	9	15	2	2	6	6	20	19	16	12	12	8	14	12	12	14	19		
Punjabi Bagh		9	0	39	1	18			2	15	24	5	2	9	12	1	7	15				41	42	16	14	2	15	24	13	53	12	13		
		72	73	79	74	53	74	79	58	28	13	19	31	40	40	14	29	13	32	38	30	64	73	106	58	80	77	84	30	16	21	68		
		12	23	48	17	38	62	15	12	21	5	11	13	22	8	11	12		12	15	13	21	34	33	17	28	25	25	22	12	12	38		
Mandir Marg		8	10	8	17	14	16	17	18	14	16	10	13	12	15	1	3	6	18	4	3	13	18	2	3	1	2	13	5	22	16	15		
		81	66	70	80	58	70	82	70	27	3	25	46	49	57	17	41	18	11	10	13	44	52	59	16	60	47	47	24	13	20	51		
		15	31	27	31	21	26	36	20	11	7	20	24	31	8	4	15	2	2	3	6	11	26	21	5	14	18	17	13	17	15	38		
Anand Vihar		43	31	30		77	41	31	124	96	45	40	55	59	61	74	46	38	14	39	96	43	36	42	28	19	12	13	25	20	38	13		
		32	27		28	29	29	33	199	98	48	49	62	77	91	74	57	168	80	56	69	50	46	39	25		13	20	45	14	14	12		
		30	31	19	40	34	36	72	223	60	91	61	68	75	88	74	59	120	70	88	79	51	63	25	23	11	17	36	15	21	13	13		
Civil Lines		73	52	70	45	61	47	49	52	52	48	51		45	47	40	42	45	54	36	57	50	55	51	62	62	52	44	62	77				
		12	133	13	120	10	13	12	157	70	40	41	109	98	94	75	73	67	61	61	73	90	89	85	71	118	11	5	86	95	49			
		54	64	53	60	60	59	59	65	48	44		41	53	47	55	46	58	50	58	52	61	66	68	59	61	70	71	73					
IGI Airport		47	59	59	57	54	50	53	51	38	69	48				47	49	51	50	56	70	71	61	41	52		63	51	74	51	40	47		
		13	132	11	120	13	11	12	108	109	67	87	101		10	9	76	75	66	99	80	68	96	88	112	14	6	107	10	10	99	47	60	87
		60	95	75	67	57	62	69	55	74	39				57	55	52	47	51	44	53	62	65	56	76	69	72	63	56	32	49	66		
DMS, Shadi pur	12.00-07.00		2	15	1	0	1	1	1	7	1	1	9	1	1	1	0	1	1	1	1	1	1	1	0	0	1	0	0	1	1	0		
	8.00-15.00	64	45	51	1	1	1	1	47	40	1	1	30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	16.00-23.00	18	19	20	2	2	2	1	22	19	1	1	16	1	1	1	1	1	1	1	0	1	1	2	1	1	1	2	5	1	1	1		
NSIT	12.00-07.00	3	3	3	6	2	4		3	2	24	10	3	3	6	3	3	7	1	5	3	12	8	3	4	1	2	2	6	12	2	2		
	8.00-15.00	49	44	40	40	35	44	75	54	30	13	18	16	21	18	10	15	20	16	23	2	19	22	27	12	10	7	19	4	2	6	13		
	16.00-23.00	20	18	15	17	23	34	19	25	22	5	12	13	24	15	9	10	8	11	8	2	13	16	20	5	10	12	15	5	1	4	11		

CO of Delhi: 1st set of AAQ data (31 days - period 05.12.2014-04.01.2015)

Time\Date		5-Dec	6-Dec	7-Dec	8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec	1-Jan	2-Jan	3-Jan	4-Jan
R K Puram	12.00-07.00	1.7	1.5	1.4	1.6	2.3	2.1	1.6	1.5	1.8	0.8	0.8	1.1	1.1	1.0	1.3	1.1	1.0	1.8	1.1	2.7	1.5	1.4	1.6	2.9	1.5	1.9	1.2	3.1	2.5	1.3	1.2
	8.00-15.00	1.1	1.3	1.3	1.4	1.4	1.7	1.8	1.5	1.1	0.8	1.0	1.0	1.0	1.2	1.5	1.2	1.4	1.8	1.4	1.8	1.5	1.6	1.6	2.5	1.8	1.8	1.4	1.9	1.3	1.3	1.3
	16.00-23.00																															
Punjabi Bagh	12.00-07.00	1.3	0.9	1.1	0.6	1.8	1.2	1.0	0.7	1.0	1.0	1.1	0.9	1.2	1.0	0.8	0.9	1.1				1.0	0.7	1.0	1.1	0.7	3.0	2.0		-1.5	2.2	1.9
	8.00-15.00	0.8	1.0	1.2	1.2	0.5	1.0	1.3	1.4	1.4	1.4	1.4	1.4	1.2	1.4	1.6	1.5	1.5	1.6	1.6	1.4	1.3	1.6	1.6	1.5	1.4	2.6	2.6	2.1	2.4	2.6	2.4
	16.00-23.00	3.6	1.6	2.8	6.8	1.8	2.6	2.7	6.0	1.0	1.6	1.9	1.8	1.3	2.0	2.1	1.3		1.4	2.2	1.5	1.8	2.0	5.2	2.2	4.2	3.8	5.8	7.1	2.5	3.1	2.6
Mandir Marg	12.00-07.00	2.7	1.8	1.0	0.9	4.6	1.6	1.6	2.1	2.7	0.6	0.6	1.2	1.0	1.1	1.4	1.3	1.1	2.8	1.5	3.8	1.2	0.9	1.2	3.2	1.0	1.5	0.9	1.9	4.3	0.8	0.9
	8.00-15.00	1.2	1.0	0.9	1.0	2.0	0.9	1.2	1.8	1.5	1.0	1.0	1.2	1.2	1.7	2.1	1.2	1.7	2.3	1.7	2.8	1.4	1.2	1.8	2.7	2.0	2.1	0.9	2.5	0.8	0.9	0.6
	16.00-23.00	3.3	1.9	2.2	3.1	2.3	2.0	2.1	2.9	1.0	1.3	1.4	1.7	1.3	2.1	2.5	1.5	3.0	2.4	2.7	2.3	1.9	1.7	3.9	3.8	2.8	2.9	2.9	2.1	1.2	1.4	0.9
Anand Vihar	12.00-07.00	3.3	1.2	1.4		4.9	1.6	1.4	2.7	1.3	0.6	0.5	1.4	0.6	0.8	1.4	0.8	0.7	1.6	1.2	3.1	1.1	1.1	1.1	1.9	1.5	2.2	1.2	1.2	4.1	1.2	1.4
	8.00-15.00	1.1	1.2		1.5	0.6	0.6	1.3	0.9	1.3	1.0	0.8	1.4	1.3	1.5	2.2	1.6	1.5	1.4	1.6	1.7	1.9	1.7	2.1	2.4	2.2	2.0	1.3	2.1	1.0	1.4	1.2
	16.00-23.00	2.8	2.2	6.1	4.6	2.4	2.1	2.4	5.4	1.1	1.0	1.9	1.7	1.9	2.0	2.0	1.2	3.3	2.0	5.5	2.1	2.1	2.6	7.8	5.1	5.3	4.4	5.3	4.6	1.3	2.1	1.5
Civil Lines	12.00-07.00	5.4	2.7	1.0	2.1	5.5	2.3	2.3	2.7	3.9	0.5	0.6		1.2	1.3	1.5	1.2	0.7	3.2	1.2	3.9	1.2	1.0	1.6	4.1	1.5	2.5	1.2	2.9	5.2		
	8.00-15.00	2.5	1.9	0.9	1.5	4.0	1.5	2.0	2.2	1.8	0.7	0.7	1.7	1.2	1.5	1.7	1.2	1.4	2.7	0.8	2.8	1.2	1.2	1.8	3.0	2.3	2.8	1.3	0.7	2.2		
	16.00-23.00	4.6	2.5	2.8	4.2	4.6	3.6	4.2	5.3	1.3	1.1		2.9	1.5	2.4	3.0	1.5	3.9	2.9	3.3	2.3	1.8	1.8	4.2	6.2	4.5	4.9	4.7	3.8			
IGI Airport	12.00-07.00	0.9	0.9	1.0	1.0	0.9	1.0	1.0	1.0	0.9	0.9	0.9	0.9	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	1.0	1.0	0.9	0.9	1.0	1.0
	8.00-15.00	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	1.0	0.9	0.9	1.0	1.0	0.9	1.0	0.9	0.9	1.0	0.9	1.0	0.9	1.0	1.0	1.0	0.9	0.9	1.0	0.9
	16.00-23.00	1.0	1.0	1.0	0.9	1.0	0.8	0.9	0.9	0.8	0.9	0.9	1.0	0.9	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	0.9	0.9	0.8	0.9	1.0	0.9	0.9
DMS, Shadipur	12.00-07.00	0.7	0.6	1.5	0.7	0.5	0.9	0.6	1.1	0.3	1.0	1.0	0.6	0.7	0.9	1.4	0.5	0.6	0.7	0.6	0.9	0.8	0.6	0.6	0.2	0.4	0.6	0.5	0.4	0.6	0.8	0.4
	8.00-15.00	0.7	0.8	0.8	0.8	0.7	0.7	0.7	1.5	0.9	1.1	1.0	0.5	0.9	0.9	0.7	0.8	0.8	0.8	1.0	1.2	0.7	0.6	0.6	0.6	0.9	0.8	0.5	0.7	0.8	0.9	0.9
	16.00-23.00	1.2	2.1	1.3	2.4	1.5	1.6	1.2	1.6	0.8	1.1	0.9	0.8	0.7	0.7	0.7	0.7	1.1	0.7	1.3	0.5	0.8	1.0	2.2	1.1	1.2	1.1	2.2	4.9	0.9	1.0	0.9
IHBAS	12.00-07.00	14.6	15.8	7.4	4.8	16.4	6.0	7.3	9.2	21.9	7.1	3.7	2.0	3.9	4.5	5.9	5.1	5.3	8.7	5.9	14.9	7.1	5.5	7.5	20.6	6.9	7.2	5.7	7.1	8.0	5.4	6.6
	8.00-15.00	7.4	6.4	5.0	5.5	7.0	5.8	7.8	9.1	4.7	6.3	5.6		#####	5.7	7.3	6.5	6.7	9.2	7.1	10.8	7.6	6.2	8.7	10.1	13.5	8.6	5.3	8.7	4.2	5.6	5.0
	16.00-23.00	7.5	7.2	6.9	10.7	8.3	5.0	4.9	20.0	5.8	9.1	7.1	0.3		6.8	6.9	7.1	11.5	9.3	13.0	10.3	7.9	10.3	15.4	15.5	11.8	10.2	12.7	13.1	11.1	5.3	3.3
NSIT	12.00-07.00	1.1	1.0	0.6	0.7	2.3	1.3		1.1	1.6	0.4	0.4	0.7	0.6	0.5	0.6	0.5	0.4	1.3	0.5	1.2	0.5	0.5	0.7	2.5	0.5	0.8	0.8	2.1	2.3	0.6	0.8
	8.00-15.00	0.6	0.5	0.5	0.5	1.3	0.6	0.4	0.7	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.9	0.5	0.7	0.5	0.5	0.7	1.0	0.6	0.7	0.5	1.0	0.6	0.5	0.5
	16.00-23.00	1.9	0.6	1.1	1.8	0.7	1.0	1.2	1.4	0.4	0.5	0.6	0.6	0.5	0.5	0.8	0.5	0.8	0.8	1.5	0.7	0.7	0.8	1.1	0.7	1.0	0.8	1.4	1.9	0.6	0.8	0.6

NH3 of Delhi: 1st set of AAQ data (31 days - period 05.12.2014-04.01.2015)						
Time\Date	R K Puram	Punjabi Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport
12/5/2014	42	128	61	22	30	15
12/6/2014	38	124	56	18	41	21
12/7/2014	31	96	46	15	29	16
12/8/2014	34	102	45	17	32	15
12/9/2014	53	153	63	17	40	21
12/10/2014	47	122	50	12	33	15
12/11/2014	37	98	52	27	30	16
12/12/2014	46	92	59	52	30	15
12/13/2014		107	74	47	48	24
12/14/2014		94	65	38	30	16
12/15/2014	24	79	52	31	21	23
12/16/2014	29	89	56	34	54	22
12/17/2014	29	91	67	34	50	
12/18/2014	33	96	87	34	57	24
12/19/2014	37	115	101	37	59	27
12/20/2014	48	104	76	36	77	36
12/21/2014	65	110	94	36	67	34
12/22/2014	65	137	97	42	72	32
12/23/2014	66	106	84	38	60	33
12/24/2014	69	137	110	53	69	35
12/25/2014	55	102	86	40	64	27
12/26/2014	57	107	84	39	71	30
12/27/2014	50	107	83	42	54	20
12/28/2014	61	130	112	34	106	30
12/29/2014	56	125	96	26	53	23
12/30/2014	66	140	97	24	78	44
12/31/2014	62	96	83	81	44	25
1/1/2015	93	123	104	138	47	28
1/2/2015	77	102	106	99	55	17
1/3/2015	55	69	84	69		16
1/4/2015	66	81	85	74		32

C6H6 of Delhi: 1st set of AAQ data (31 days - period 05.12.2014-04.01.2015)						
Time\Date	R K Puram	Punjabi Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport
12/5/2014	14	0	17	12	12	44
12/6/2014	10	0	10	6	6	23
12/7/2014	8	0	7	5	5	20
12/8/2014	10	0	9	8	8	25
12/9/2014	16	1	16	10	10	39
12/10/2014	14	0	9	6	6	24
12/11/2014	11	0	10	8	8	26
12/12/2014	14	0	11	9	9	36
12/13/2014	11	0	7	5	5	27
12/14/2014	4	0	3	3	3	14
12/15/2014	7	0	4	3	3	11
12/16/2014	8	0	8	5	5	19
12/17/2014	7	0	6	5	5	19
12/18/2014	11	0	8	6	6	22
12/19/2014	16	2	10	8	8	25
12/20/2014	9	1	7	5	5	19
12/21/2014	10	1	8	6	6	28
12/22/2014	13	1	11	9	9	36
12/23/2014	13	2	8	8	8	34
12/24/2014	17	1	16	14	14	36
12/25/2014	11	2	10	7	7	25
12/26/2014	9	2	8	7	7	22
12/27/2014	13	2	12	11	11	33
12/28/2014	23	3	16	14	14	43
12/29/2014	15	2	11	11	11	33
12/30/2014	17	1	13	10	10	33
12/31/2014	12	1	9	6	6	29
1/1/2015		1	16	11	11	41
1/2/2015	12	1	13	4	4	51
1/3/2015	7	0	7	5	5	
1/4/2015	6	1	6	4	4	
	12	1	10	7	7	29

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Appendix - IB**2nd set of AAQ data
(37 days - period 05.01.2015-10.02.2015)****Alwar, Rajasthan: SO₂, NO₂, PM₁₀ (Period 30 Days from 10.01.2015 to 10.02.2015)**

Sampling Date	Monitoring Station	Type of Location	SO ₂	NO ₂	PM ₁₀
10-01-15	GAURAV SOLVEX LTD	IND.	15	22	162
14-01-15	GAURAV SOLVEX LTD	IND.	15	21	224
17-01-15	GAURAV SOLVEX LTD	IND.	13	21	141
21-01-15	GAURAV SOLVEX LTD	IND.	12	23	251
24-01-15	GAURAV SOLVEX LTD	IND.	11	20	309
28-01-15	GAURAV SOLVEX LTD	IND.	12	21	320
31-01-15	GAURAV SOLVEX LTD	IND.	13	19	196
04-02-15	GAURAV SOLVEX LTD	IND.	13	21	207
07-02-15	GAURAV SOLVEX LTD	IND.	11	21	195
05-01-15	R.O.BUILDING	RES.	9	16	306
08-01-15	R.O.BUILDING	RES.	12	23	205
12-01-15	R.O.BUILDING	RES.	11	18	237
15-01-15	R.O.BUILDING	RES.	12	17	252
19-01-15	R.O.BUILDING	RES.	13	18	262
22-01-15	R.O.BUILDING	RES.	11	19	104
29-01-15	R.O.BUILDING	RES.	10	18	173
02-02-15	R.O.BUILDING	RES.	9	19	214
05-02-15	R.O.BUILDING	RES.	10	19	220
09-02-15	R.O.BUILDING	RES.	10	19	171
06-01-15	RIICO PUMP HOUSE	IND.	13	24	120
09-01-15	RIICO PUMP HOUSE	IND.	9	16	233
13-01-15	RIICO PUMP HOUSE	IND.	12	24	272
16-01-15	RIICO PUMP HOUSE	IND.	11	24	181
20-01-15	RIICO PUMP HOUSE	IND.	12	22	120
23-01-15	RIICO PUMP HOUSE	IND.	10	20	176
27-01-15	RIICO PUMP HOUSE	IND.	8	22	129
30-01-15	RIICO PUMP HOUSE	IND.	12	20	192
03-02-15	RIICO PUMP HOUSE	IND.	13	22	289
06-02-15	RIICO PUMP HOUSE	IND.	12	22	215
10-02-15	RIICO PUMP HOUSE	IND.	13	22	158

Bharatpur, Rajasthan: SO₂, NO₂, PM₁₀ (Period 02 Days from 09.02.2015 to 10.02.2015)

Sampling Date	Monitoring Station	Type of Location	City	State	Monitoring Agency	SO ₂	NO ₂	PM ₁₀
09-02-15	R.O. Building	RES	Bharatpur	Rajasthan	RSPCB	9	20	108
10-02-15	RIICO Office	IND	Bharatpur	Rajasthan	RSPCB	12	20	117

Rohtak, Haryana: SO₂, NO₂, PM₁₀, PM_{2.5}, CO & O₃ (MDU, Rohtak; Period 41 Days from 01.01.2015 to 10.02.2015)

Date	SO ₂ µg/m ³	NO ₂ µg/m ³	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	CO mg/m ³	O ₃ µg/m ³
01-01-15	2.99	21.81	*	66.58	2.48	23.36
02-01-15	0.85	12.98	*	58.85	0.93	22.38
03-01-15	4.62	37.22	*	63.46	0.88	25.39
04-01-15	1.90	28.49	*	71.12	0.50	16.86
05-01-15	1.96	13.09	*	73.99	1.32	18.73
06-01-15	1.83	8.59	*	63.71	1.85	27.36
07-01-15	1.24	4.52	*	68.21	2.87	30.95
08-01-15	1.17	13.44	*	64.56	1.07	28.20
09-01-15	1.83	18.23	*	77.78	1.09	25.09
10-01-15	1.71	17.82	*	68.02	1.71	28.56
11-01-15	2.66	28.57	*	61.28	1.07	24.44
12-01-15	2.72	25.96	*	73.96	0.64	22.14
13-01-15	2.15	26.07	*	65.07	0.75	21.37
14-01-15	3.21	26.92	*	66.11	0.96	23.51
15-01-15	3.82	27.86	*	57.58	0.95	18.65
16-01-15	2.45	22.29	*	69.16	0.75	17.89
17-01-15	2.75	34.11	*	62.36	0.99	20.27
18-01-15	2.28	22.96	*	52.88	0.68	20.54
19-01-15	2.59	32.35	*	53.04	0.86	24.08
20-01-15	3.88	25.92	*	38.19	0.92	26.12
21-01-15	2.98	27.37	*	50.72	1.07	25.58
22-01-15	3.80	26.43	*	42.03	0.82	24.12
23-01-15	4.22	24.06	*	31.77	0.72	20.36
24-01-15	3.48	21.54	*	30.41	1.05	13.61
25-01-15	2.69	24.80	*	43.01	0.79	19.13
26-01-15	3.42	30.36	*	67.21	0.65	23.60
27-01-15	2.14	29.45	*	69.96	0.49	28.38
28-01-15	4.13	36.79	*	65.35	0.91	25.35
29-01-15	2.96	29.49	*	60.00	0.73	22.45
30-01-15	3.54	22.06	*	56.85	0.59	21.47
31-01-15	3.47	29.92	*	58.75	0.48	18.81
01-02-15	3.01	19.30	103.47	*	0.45	19.87
02-02-15	5.16	29.95	96.60	*	0.52	25.50
03-02-15	4.87	24.13	78.28	*	0.39	26.03
04-02-15	6.31	24.58	97.39	*	1.00	28.38
05-02-15	6.50	28.53	97.04	*	1.06	21.63
06-02-15	5.09	30.51	99.85	*	0.98	25.64
07-02-15	4.27	32.25	104.48	*	0.85	25.12
08-02-15	7.46	33.03	92.65	*	1.01	28.70
09-02-15	1.31	25.70	111.89	*	1.07	25.12
10-02-15	2.08	27.70	103.09	*	1.23	27.15

Faridabad, Haryana: SO₂, NO₂, PM₁₀ & PM_{2.5}

	SO ₂ (ug/m ³)	NO ₂ (ug/m ³)	PM ₁₀ (ug/m ³)	PM 2.5
05-01-15	6	57	177	*
06-01-15	11	78	266	*
07-01-15	15	64	406	*
08-01-15	11	72	336	*
09-01-15	16	86	441	*
10-01-15	11	71	335	*
11-01-15	8	60	359	*
12-01-15	14	49	322	*
13-01-15	9	54	283	*
14-01-15	6	46	253	*
15-01-15	26	83	302	*
16-01-15	9	64	*	166
17-01-15	10	68	*	199
18-01-15	9	66	*	204
19-01-15	9	54	*	198
20-01-15	8	37	*	181
21-01-15	7	34	*	173
22-01-15	5	40	*	124
23-01-15	12	54	*	89
24-01-15	5	48	*	93
25-01-15	7	54	*	145
26-01-15	8	60	*	127
27-01-15	8	57	*	142
28-01-15	5	52	*	119
29-01-15	10	70	*	111
30-01-15	10	60	*	89
31-01-15	13	71	*	97

Ghaziabad, Uttar Pradesh: SO₂, NO₂, PM₁₀ (Period 21 Days)

Date	Name of the Locations	SO ₂ (ug/m ³)	NO ₂ (ug/m ³)	PM-10 (ug/m ³)
05.01.15	Amko Export, B.S. Road, Ghaziabad	22	34	260
08.01.15	Amko Export, B.S. Road, Ghaziabad	23	36	276
13.01.15	Amko Export, B.S. Road, Ghaziabad	21	34	243
15.01.15	Amko Export, B.S. Road, Ghaziabad	22	37	238
19.01.15	Amko Export, B.S. Road, Ghaziabad	24	37	292
22.01.15	Amko Export, B.S. Road, Ghaziabad	22	36	210
27.01.15	Amko Export, B.S. Road, Ghaziabad	24	38	154
29.01.15	Amko Export, B.S. Road, Ghaziabad	24	39	242
02.02.15	Amko Export, B.S. Road, Ghaziabad	23	36	308
05.02.15	Amko Export, B.S. Road, Ghaziabad	22	37	299
09.02.15	Amko Export, B.S. Road, Ghaziabad	24	37	248
02.01.15	Atlas Cycle, Sahibabad Industrial Area, Ghaziabad	24	39	316
06.01.15	Atlas Cycle, Sahibabad Industrial Area, Ghaziabad	24	38	296
09.01.15	Atlas Cycle, Sahibabad Industrial Area, Ghaziabad	25	41	285
14.01.15	Atlas Cycle, Sahibabad Industrial Area, Ghaziabad	24	36	267
16.01.15	Atlas Cycle, Sahibabad Industrial Area, Ghaziabad	26	41	274
21.01.15	Atlas Cycle, Sahibabad Industrial Area, Ghaziabad	25	39	269
24.01.15	Atlas Cycle, Sahibabad Industrial Area, Ghaziabad	23	39	262
28.01.15	Atlas Cycle, Sahibabad Industrial Area, Ghaziabad	24	38	218
03.02.15	Atlas Cycle, Sahibabad Industrial Area, Ghaziabad	23	35	262
07.02.15	Atlas Cycle, Sahibabad Industrial Area, Ghaziabad	21	34	299

Gurgaon, Haryana: SO₂, NO₂, PM₁₀, PM_{2.5}, CO & O₃ (Period 41 Days from 01.01.2015 to 10.02.2015)

Pollutants Daily Average Value, Gurgaon						
Date	SO ₂ µg/m ³	NO ₂ µg/m ³	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	CO mg/m ³	O ₃ µg/m ³
01-01-15	4.20	28.97	*	61.05	0.71	15.07
02-01-15	3.17	27.10	*	53.71	0.88	19.75
03-01-15	3.79	29.07	*	61.52	0.94	15.17
04-01-15	3.74	40.10	*	57.98	0.93	19.53
05-01-15	2.72	31.37	*	87.58	0.95	22.13
06-01-15	2.61	27.25	*	81.97	1.03	24.53
07-01-15	3.77	26.70	*	99.65	1.33	26.69
08-01-15	4.01	25.85	*	75.83	0.91	27.56
09-01-15	3.42	30.37	*	69.23	1.10	29.74
10-01-15	3.84	41.79	*	97.88	1.16	24.93
11-01-15	3.83	30.62	*	95.11	0.60	25.95
12-01-15	3.04	32.93	*	59.87	0.46	24.38
13-01-15	2.85	19.68	*	70.34	0.85	19.35
14-01-15	3.84	32.04	*	68.07	1.06	21.00
15-01-15	4.23	24.51	*	68.56	0.86	23.24
16-01-15	3.65	26.11	*	70.32	0.83	18.96
17-01-15	3.93	27.17	*	73.38	1.39	25.00
18-01-15	3.88	22.69	*	70.10	0.82	22.85
19-01-15	4.45	26.45	*	43.69	0.70	21.78
20-01-15	4.35	19.10	*	55.97	0.96	17.78
21-01-15	3.45	22.19	*	56.52	0.83	19.88
22-01-15	3.51	26.11	*	65.14	0.72	18.62
23-01-15	3.26	27.14	*	68.50	0.72	18.12
24-01-15	4.59	23.22	*	51.01	0.95	19.56
25-01-15	3.39	24.04	*	58.64	0.99	19.85
26-01-15	4.07	30.06	*	79.07	0.76	34.70
27-01-15	2.25	28.05	*	81.35	0.72	31.89
28-01-15	5.10	34.07	*	80.68	0.93	28.49
29-01-15	2.93	27.05	*	63.83	0.77	33.02
30-01-15	3.61	23.22	*	70.18	0.58	26.51
31-01-15	3.19	27.16	*	73.44	0.51	21.14
01-02-15	2.76	20.53	113.70	*	0.35	23.37
02-02-15	4.85	16.50	71.00	*	0.35	30.51
03-02-15	4.53	14.04	110.65	*	0.28	31.81
04-02-15	4.81	20.79	94.56	*	0.49	21.43
05-02-15	5.68	45.83	106.96	*	0.42	35.65
06-02-15	6.18	30.96	107.25	*	0.37	29.66
07-02-15	5.11	34.14	107.36	*	0.59	31.65
08-02-15	6.00	32.49	119.25	*	0.78	25.52
09-02-15	4.00	20.57	117.77	*	1.03	60.25
10-02-15	4.86	20.79	130.15	*	0.95	23.30

NOIDA Uttar Pradesh: SO2, NO2, PM10, (Period 21 Days)

Sampling Date	Type	STN Short Name	SO2	NO2	PM10
06-01-15	Residential	ROB	8	28	144
08-01-15	Residential	ROB	8	24	157
13-01-15	Residential	ROB	8	21	142
15-01-15	Residential	ROB	9	24	148
20-01-15	Residential	ROB	8	24	143
22-01-15	Residential	ROB	8	23	102
27-01-15	Residential	ROB	7	19	124
07-01-15	Industrial	Gee Pee	8	29	158
12-01-15	Industrial	Gee Pee	8	32	151
14-01-15	Industrial	Gee Pee	9	33	153
19-01-15	Industrial	Gee Pee	10	27	149
21-01-15	Industrial I	Gee Pee	8	28	155
23-01-15	Industrial	Gee Pee	6	18	120
28-01-15	Industrial	Gee Pee	8	23	158
30-01-15	Industrial	Gee Pee	8	26	134
03-02-15	Residential	ROB	6	22	133
05-02-15	Residential	ROB	8	22	130
10-02-15	Residential	ROB	6	22	139
02-02-15	Industrial	Gee Pee	7	20	151
04-02-15	Industrial	Gee Pee	9	27	148
09-02-15	Industrial	Gee Pee	7	30	142

DELHI: SO2, NO2, PM10, PM2.5, CO, O3, C6H6, NH3

A. SO2, NO2, PM10, PM2.5, CO, O3, C6H6, NH3 BY DPCC

Time\Date	SO2						NO2						PM10						PM2.5					
	RK Puram	Punjabi Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport	RK Puram	Punjabi Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport	RK Puram	Punjabi Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport	RK Puram	Punjabi Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport
5-Jan	11	17	4		6	5	36	57	48	83	28	24	170	215	149	379		200	117	124	123	144	281	65
6-Jan	12	15	4		6	7	67	62	70	92	30	51	251	299	212	431		289	179	180	171	243	435	70
7-Jan	12	21	5	10	7	7	54	72	65	86	29	48	350	409	261	591		432	244	246	226	304	281	97
8-Jan	11	15	5	7	2	4	61	73	91	90	34	51	284	316	279	512		326	196	206	232	273	276	71
9-Jan	12	14	4	19	2	6	72	83	94	98	34	59	444	448	324	645		441	286	262	263	312	325	111
10-Jan	12	14	6	20	6	7	58	80	89	121	38	47	348	393	266	709		333	229	234	223	309	288	79
11-Jan	13	13	5	17	4	6	52	80	79	93	27	51	415	478	307	569		494	285	290	263	300	364	105
12-Jan	14	15	7	26	18		68	115	110	91	35	58	409	514	323	529			272	318	276	300	283	
13-Jan	15	14	5	16	23		62	112	115	98	33	58	334	429	264	489			238	262	227	308	296	
14-Jan	13	30	6	20	9	13	72	93	81	81	34	70	282	300	226	306	390	335	215	202	201	236	256	70
15-Jan	12	19	7	25	10	12	64	90	122	99	40	69	316	339	245	747	393	315	215	222	215	315	282	79
16-Jan	12	16	6	16	7	12	70	85	98	84	44	73	297	339	222	760	368	317	195	211	190	321	298	67
17-Jan	16	15	6	18	3	11	65	86	103	39	59	73	415	382	262	649	391	342	275	239	216	359	277	66
18-Jan	16	18	6	16	11	10	60	98	97	16	39	71	427	408	262	601		327	278	256	229	403	291	67
19-Jan	12	18	6	13	7	11	70	115	107	49	41	64	321	420	289	493		344	202	270	237	371	206	75
20-Jan	16	19	9	25	16	7	51	97	88	51	39	34	304	361	274	373		375	196	233	219	264	318	76
21-Jan	18	25	10	36	23	13	57	111	85	43	38	55	311	354	244	355		356	191	206	199	234	273	63
22-Jan	12	19	5	32	28	10	54	97	92	41	40	65	196	233	176	212		274	136	158	155	178	197	59
23-Jan	13	20	10	28	12	6	50	81	71	78	33	48	138	149	109	188		141	77	88	86	114	115	50
24-Jan	13	12	5	17	2	5	36	57	45	107	29	31	147	167	118	322	103	156	99	96	95	125	308	49
25-Jan	12	13	4	17	4	6	39	71	58	116	29	38	212	231	158	422	172	231	135	134	125	171	256	54

26-Jan	13	12	6	30	9	9	51	67	57	95	24	49	190	233	182	227	151	274	133	159	154	190	144	72
27-Jan	13	12	6	16	8	8	48	70	55	101	33	38	226	260	180	345	235	255	142	168	150	180	192	99
28-Jan	13	12	4	9	5	8	42	69	47	101	33	42	226	259	170	531	214	236	136	158	145	186	265	56
29-Jan	18	14	7	10	12	18	58	89	72	126	42	65	260	277	170	530	226	323	162	158	138	172	185	79
30-Jan	17	14	7	10	14	18	60	85	73	135	41	54	260	238	160	514	198	194	145	124	127	180	190	76
31-Jan	21	12	12	14	14	20	64	95	83	138	45	75	315	303	158	488	218	162	183	162	127	200	218	62
1-Feb	20	12	14	27	30	29	49	123	194	86	53	85	372	435	263	639	441	401	217	232	217	319	233	80
2-Feb	14	13	7	15	17	12	62	102	87	76	42	40	272	336	224	345	291	343	162	181	179	201	370	139
3-Feb	16	8	7	11	9	7	51	63	57	63	37	28	224	250	173	328	215	152	139	149	137	176	342	71
4-Feb	15	4	5	6	4	6	54	60	50	98	30	36	178	181	126	305	183	188	105	110	103	147	291	64
5-Feb	16	5	6	8	7	11	58	77	64	140	37	56	276	238	126	315	194	216	142	127	97	181	295	45
6-Feb	19	17	5	23	11	21	70	117	163	122	46	105	336	380	199	524	320	373	180	199	163	329	278	74
7-Feb	20	29	9	34	12	23	82	115	130	112	43	101	413	14	187	545	277	364	236	149	152	246	324	125
8-Feb	15	30	2	23	16	24	65	94	107	79	39	74	282	257	175	516	253	307	158	143	143	236	248	72
9-Feb	25	25	14	21	23	16	66	78	43	90	36	52	199	197	98	317	196	250	112	99	56	100	294	68
10-Feb	17	26	9	14	13	19	61	80	24	117	40	67	239	235	140	355	171	255	127	122	109	102	326	61

Time\ Date	CO						NH3						O3						BEN					
	RK Pur am	Punjab Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport	RK Pur am	Punjab Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport	RK Pur am	Punjab Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport	RK Pur am	Punjab Bagh	Mandir Marg	Anand Vihar	Civil Lines	IGI Airport
5-Jan	1	2	1	1	2	1	58	86	77	65	72	33	33	65	48	15	77	79	4	2	3	4	15	38
6-Jan	1	2	1	1	2	1	59	87	83	75	66	26	21	28	20	16	53	60	8	1	6	3	18	43
7-Jan	2	3	1	2	2	1	58	83	79	69	43	17	13	17	13	16	42	58	11	1	8	4	22	45
8-Jan	2	2	1	2	2	1	54	84	82	74	50	21	10	12	10	16	49	51	12	2	11	6	23	48
9-Jan	2	2	1	2	2	1	54	87	84	73	59	23	9	29	14	16	52	64	11	1	9	6	20	44
10-Jan	2	3	1	2	2	1	56	86	76	75	46	26	15	38	23	17	51	70	10	1	8	6	21	43

11-Jan	2	3	1	2	3	1		66	10 5	81	85	57	28		14	28	19	25	61	72		14	1	9	6	24	47
12-Jan	2	2	1	2	3			56	95	79	69	38	29		9	18	16	22	49			10	1	7	5	26	
13-Jan	2	3	2	3	3			55	92	72	88	34	29		21	35	14	23	47			11	1	7	5	27	
14-Jan	2	3	1	2	2	1		59	91	75	72	59	26		22	27	21	27	49	46		10	1	7	6	22	45
15-Jan	2	3	2	3	4	1		52	84	67	73	40	18		13	24	26	14	68	62		13	2	11	4	31	48
16-Jan	2	3	1	3	3	1		54	88	69	65	50	23		20	32	28	16	64	70		10	2	11	9	26	47
17-Jan	2	3	2	3	4	1		67	95	71	45	46	21		13	35	32	15	45	72		11	2	12	9	36	45
18-Jan	2	3	1	3	4	1		60	96	71	41	38	21		26	44	36	20	79	71		11	1	12	9	30	44
19-Jan	2	3	1	2	3	1		59	10 6	80	57	58	23		26	41	34	16	72	65		8	1	8	12	22	47
20-Jan	1	2	1	2	2	1		49	87	77	42	34	24		34	49	28	14	50	77		5	0	5	9	16	41
21-Jan	1	3	1	2	2	1		36	77	65	35	43	24		14	22	16	13	44	52		5	0	5	3	17	41
22-Jan	1	2	1	2	2	1		43	77	65	38	27	22		7	10	8	13	40	40		5	0	4	3	17	42
23-Jan	1	2	1	1	1	1		43	56	55	58	27	19		20	35	29	12	58	63		4	0	5	3	13	39
24-Jan	1	2	1	1	2	1		45	52	53	61	22	12		23	31	27	14	52	64		5	1	5	2	14	38
25-Jan	1	1	1	1	2	1		34	51	52	65	26	15		43	48	39	15	65	76		5	3	5	3	13	41
26-Jan	1	1	1	2	2	1		41	62	60	66	30	19		24	36	26	16	57	62		6	3	5	3	15	41
27-Jan	1	1	1	2	2	1		36	66	58	69	42	21		36	47	41	19	60	74		6	3	5	3	14	40
28-Jan	1	1	1	2	2	1		29	60	50	62	31	19		39	48	40	15	63	71		4	3	5	3	16	41
29-Jan	1	1	1	1	2	1		27	62	47	61	32	16		43	51	38	16	68	78		6	3	7	4	17	43
30-Jan	1	1	1	2	2	1		28	59	49	62	34	14		40	55	39	11	71	85		5	4	6	4	15	44
31-Jan	2	1	1	2	2	1		28	63	47	63	29	15		42	62	54	15	78	81		8	4	7	5	20	43
1-Feb	2	2	2	2	4	1		35	77	60	10 7	40	20		33	49	28	51	61	74		10	4	11	5	27	47
2-Feb	1	2	1	1	2	1		54	87	67	79	60	25		41	49	36	25	57	85		5	3	4	7	15	40
3-Feb	1	2	1	1	2	1		60	71	67	59	51	19		59	66	52	19	60	86		4	3	4	3	14	39
4-Feb	1	2	1	2	2	1		52	65	63	52	33	15		35	38	34	5	54	64		5	3	6	3	15	40
5-Feb	2	3	1	2	2	1		46	55	52	43	25	16		44	55	46	12	72	68		8	4	7	5	16	42
6-Feb	2	2	2	3	4	1		46	64	58	75	20	9		42	54	41	22	76	72		11	3	12	4	25	49
7-Feb	2	2	1	2	3	1		57	61	55	72	25	14		40	59	35	37	73	71		12	1	9	8	19	48
8-Feb	2	2	1	2	3	1		52	66	69	70	31	17		37	51	2	10	74	74		10	1	9	6	19	43
9-Feb	1	2	1	1	2	1		53	57	57	47	36	17		20	46	56	12	71	73		8	1	5	6	16	43
10-Feb	1	2	1	1	2	1		42	59	64	43	26	15		46	54	48	24	72	85		8	1	7	3	17	43

B. SO2, NO2, PM10, PM2.5, CO, O3, C6H6, NH3 BY CPCB**DSIT, DELHI**

Date	SO2	NO2	RSPM
05.01.2015	5	19	214
06.01.2015	7	23	226
07.01.2015	8	23	229
08.01.2015	8	25	229
09.01.2015	7	26	228
10.01.2015	13	25	255
11.01.2015	7	25	227
12.01.2015	7	31	227
13.01.2015	13	31	253
14.01.2015	7	24	224
15.01.2015	18	34	278
16.01.2015	9	32	234
17.01.2015	8	36	231
18.01.2015	4	33	211
19.01.2015	2	33	200
20.01.2015	3	23	208
21.01.2015	17	26	274
22.01.2015	13	26	252
23.01.2015	16	24	271
24.01.2015	7	17	224
25.01.2015	7	20	227
26.01.2015	12	18	251
27.01.2015	15	21	264
28.01.2015	12	20	248
29.01.2015	17	27	271
30.01.2015	20	26	288
31.01.2015	23	35	303
01.02.2015	18	40	277
02.02.2015	9	23	227
03.02.2015	10	18	189
04.02.2015	10	18	197
05.02.2015	15	24	245
06.02.2015	16	38	337
07.02.2015	12	30	261
08.02.2015	23	29	265
09.02.2015	25	30	210
10.02.2015	14	50	241

IHBAS, DELHI

Date	SO2	NO2	RSPM
05.01.2015	5	30	132
06.01.2015	8	28	138
07.01.2015	11	26	159
08.01.2015	5	25	127
09.01.2015	8	25	146
10.01.2015	7	24	249
11.01.2015	8	24	136
12.01.2015	13	24	128
13.01.2015	11	25	206
14.01.2015	11	23	116
15.01.2015	11	24	167
16.01.2015	8	24	140
17.01.2015	8	24	156
18.01.2015	10	24	181
19.01.2015	9	31	171
20.01.2015	12	27	162
21.01.2015	21	25	165
22.01.2015	13	24	175
23.01.2015	14	24	168
24.01.2015	6	23	174
25.01.2015	9	22	167
26.01.2015	12	22	172
27.01.2015	12	22	166
28.01.2015	9	37	166
29.01.2015	8	56	179
30.01.2015	8	56	204
31.01.2015	8	66	216
01.02.2015	12	81	212
02.02.2015	16	61	213
03.02.2015	13	55	211
04.02.2015	11	53	210
05.02.2015	10	51	231
06.02.2015	10	75	193
07.02.2015	13	62	194
08.02.2015	12	62	197
09.02.2015	10	53	213
10.02.2015	11	58	175

NSIT, DELHI

Date	SO2	NO2	PM10
05.01.2015	3	36	188
06.01.2015	2	40	208
07.01.2015	7	41	272
08.01.2015	2	40	232
09.01.2015	4	45	232
10.01.2015	8	44	205
12.01.2015	7	96	331
13.01.2015	4	58	286
14.01.2015	5	55	288
15.01.2015	12	41	368
16.01.2015	5	47	443
17.01.2015	11	42	527
18.01.2015	10	43	489
19.01.2015	8	55	309
20.01.2015	4	44	197
21.01.2015	6	53	217
22.01.2015	8	49	221
23.01.2015	3	32	180
24.01.2015	21	25	169
25.01.2015	14	20	156
27.01.2015	5	36	181
28.01.2015	4	34	196
29.01.2015	4	45	243
30.01.2015	4	46	229
31.01.2015	5	59	338
01.02.2015	17	70	426
02.02.2015	2	44	190
03.02.2015	5	30	171
04.02.2015	4	31	185
05.02.2015	3	45	310
06.02.2015	14	61	353
07.02.2015	11	57	287
09.02.2015	5	43	203
10.02.2015	4	48	220

SO₂, NO₂, PM₁₀, PM_{2.5} CPCB manual monitoring (January - February)

Name of the Locations	DATE	SO ₂	NO ₂	PM ₁₀	PM _{2.5}
Pitampura	05-01-2015	4	35	221	141
	08-01-2015	4	38	171	139
	13-01-2015	4	34	242	121
	16-01-2015	4	40	202	
	21-01-2015	4	35	277	127
	27-01-2015	4	34	170	129
Sirifort	01-01-2015	4	53	173	-
	06-01-2015	4	51	192	86
	09-01-2015	4	57	197	126
	14-01-2015	4	47	101	156
	19-01-2015	4	48	237	172
	28-01-2015	4	47	130	
Janakpuri	07-01-2015	4	47	143	62
	12-01-2015	4	52	140	61
	15-01-2015	4	45	187	56
	20-01-2015	4	53	113	84
	23-01-2015	4	50	120	109
	29-01-2015	4	46	160	145
Nizamuddin	05-01-2015	4	44	203	
	08-01-2015	4	45	214	
	13-01-2015	4	47	182	
	16-01-2015	4	43	204	78
	21-01-2015	4	39	192	83
	27-01-2015	4	46	159	146
Shahzada Bagh	01-01-2015	4	67	397	110
	06-01-2015	4	55	250	155
	09-01-2015	4	65	344	163
	14-01-2015	4	61	258	144
	19-01-2015	4	58	351	135
	22-01-2015				121
Shahdara	28-01-2015	4	62	289	101
	07-01-2015	4	61	289	151
	12-01-2015	4	61	425	147
	15-01-2015	4	59	266	152
	20-01-2015	4	65	272	139
	23-01-2015	4	59	165	99
Pitampura	29-01-2015	8	59	222	
	02-02-2015	4	35	393	184
	05-02-2015	4	33	282	177
	10-02-2015	4	35	156	120
Sirifort	13-02-2015	4	36	190	
	03-02-2015	4	29	102	62
	06-02-2015	4	41	174	70
	11-02-2015	4	40	146	125
Janakpuri	16-02-2015	4	43	144	59
	04-02-2015	4	44	150	70
Nizamuddin	09-02-2015	4	40	152	82
	02-02-2015	4	41	267	62
	05-02-2015	4	50	235	112
Shahzada Bagh	10-02-2015	4	48	241	62
	03-02-2015	4	61	254	165
Shahdara	06-02-2015	4	52	233	115
	04-02-2015	4	59	126	
	09-02-2015	4	54	276	78

Delhi: CO & O3 (Period 37 Days from 05.01.2015 to 10.02.2015)

Time\Date	CAAQMS, R K Puram			CAAQMS, Punjabi Bagh			CAAQMS, Mandir Marg			CAAQMS, Anand Vihar			CAAQMS, Civil Lines			CAAQMS, IGI Airport			NSIT, CPCB			DMS			
	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	
5-Jan	20.13	46.57	31.42	47.97	98.60	44.51	29.09	74.95	39.74	13.20	14.01	16.87	57.57	104.29	70.40	64.34	98.27	74.12							
6-Jan	16.60	26.35	20.53	17.45	47.14	18.85	12.13	33.97	12.61	15.83	16.58	16.26	37.33	71.09	51.06	48.17	76.29	54.58				1.94	11.32	6.21	
7-Jan	15.22	13.99	9.68	6.24	28.69	15.04	5.30	18.78	15.71	15.82	16.60	15.51	37.23	50.35	38.98	51.12	63.52	60.70	2.68	4.64	4.25	1.49	7.42	6.67	
8-Jan	9.82	10.86	8.25	9.45	17.47	7.74	6.54	15.91	6.40	15.94	14.86	15.88	45.24	55.55	44.93	34.36	55.90	61.90	3.27	2.86	2.68	1.25	6.44	4.24	
9-Jan	9.22	9.03	10.20	23.45	44.38	17.28	6.03	29.65	5.94	15.74	15.78	16.26	35.16	72.65	49.16	52.21	77.97	61.35	5.22	8.31	10.94	4.88	21.43	13.10	
10-Jan	10.72	20.33	15.14	24.28	63.15	25.75	5.95	44.82	15.68	15.42	16.95	20.43	32.92	73.86	45.49	56.96	82.55	71.70	4.48	10.93	17.33	8.07	31.41	28.73	
11-Jan	14.21	14.54	12.84	10.76	54.57	16.73	6.05	36.24	12.86	24.57	15.43	37.61	44.87	76.64	60.41	62.42	77.40	101.88				8.08	23.37	20.12	
12-Jan	9.97	10.51	7.35	8.79	34.41	10.55	21.30	18.05	5.86	21.42	30.30	14.29	34.11	66.06	46.89							7.80	5.53	28.91	15.98
13-Jan	10.00	33.28	20.87	8.04	79.49	14.99	1.50	27.38	14.54	38.70	16.07	15.20	44.81	49.37					2.20	14.03	13.79	1.83	33.86	24.48	
14-Jan	23.36	26.45	12.44	36.56	28.43	14.59	24.54	25.10	12.95	13.96	22.02	52.08	38.57	52.59	56.29			46.46	6.35	9.26	4.31	18.50	24.49	15.32	
15-Jan	11.37	15.41	9.94	5.49	44.99	20.70	12.51	43.45	22.53	14.26	15.51	13.11	43.31	95.30	66.84	46.93	78.76	61.33	1.11	7.35	12.90	23.39	22.76	15.75	
16-Jan	6.47	34.72	19.59	7.32	57.30	28.44	4.29	51.43	26.70	15.68	15.85	14.97	55.15	86.08	49.65	54.17	84.53	64.12	2.76	10.68	12.26	1.38	26.63	24.20	
17-Jan	6.69	20.42	11.86	5.26	67.19	33.44	5.71	59.90	31.32	17.80	14.52	12.87	42.82	42.82	48.26	56.37	100.42	60.13	1.79	22.98	25.08	1.04	26.66	26.61	
18-Jan	3.63	40.60	28.40	5.46	89.96	34.67	5.79	68.12	35.11	20.79	17.89		47.73	120.01	68.50	53.54	102.52	56.29	3.78	29.33	26.20	1.57	36.28	33.23	
19-Jan	4.48	37.74	26.39	6.08	77.60	39.28	5.79	66.70	28.20		18.72	13.32	45.12	108.74	63.50	36.53	87.73	69.85	1.45	24.34	36.79	2.53	34.08	36.49	
20-Jan	14.30	58.65	26.30	15.77	87.38	41.54	12.78	44.07	25.62	16.44	13.12	13.30	41.56	66.84	42.48	59.86	105.49	66.31	6.01	32.75	31.61	4.07	42.33	41.62	
21-Jan	9.95	24.43	7.89	23.52	28.38	11.62	22.07	19.34	5.25	15.13	13.69	11.02	36.42	49.75	45.22	54.84	63.27	36.76	13.28	25.82	14.92	20.29	25.43	5.46	
22-Jan	4.26	8.65	7.81	9.29	11.62	10.08	4.02	8.76	10.99	15.84	10.21	12.79	40.78	44.36	35.40	34.26	45.51	41.48	2.49	4.11	7.67	2.93	2.56	2.95	
23-Jan	11.67	45.79	8.43	12.78	63.64	27.62	11.04	47.07	27.64	13.38	10.19	11.49	38.44	84.25	51.19	39.58	92.80	57.93	8.10	26.53	20.25	2.17	3.26	2.30	
24-Jan	12.44	35.66	21.13	19.95	43.81	30.02	17.14	38.65	25.50	13.15	13.84	14.40	42.17	67.04	47.82	52.88	77.17	61.51	7.09	18.11	18.00	1.34	1.70	30.03	
25-Jan	27.18	64.26	35.48	34.24	74.61	31.77	23.71	62.36	31.23	12.91	18.08	15.55	47.73	93.97	54.31	69.32	95.12	64.37	16.29	38.11	64.71	11.04	48.44	32.36	
26-Jan	13.34	33.17	25.55	14.94	54.56	37.96	9.91	41.41	27.98	16.52	14.41	16.88	40.70	82.77	48.03	42.57	77.12	66.03				3.15	29.91	24.88	
27-Jan	10.77	60.03	39.00	17.43	72.75	51.62	11.30	63.27	49.63	17.82	24.65	14.32	25.91	95.36	58.86	53.53	94.59	75.14		57.31	33.27	6.95	46.53	39.79	
28-Jan	22.38	65.47	27.19	36.89	70.85	35.18	25.93	61.02	31.59	11.15	25.20	10.96	43.30	92.43	53.42	56.79	86.56	68.53	15.61	34.81	26.57	15.49	48.61	33.42	
29-Jan	5.23	80.45	42.35	21.80	86.96	43.84	6.70	70.37	38.33	8.42	23.36	17.58	36.64	106.01	60.81	59.77	103.19	71.88	9.19	42.44	32.46	3.94	58.35	67.29	

30-Jan	7.18	73.71	39.45	29.76	85.77	50.11	3.48	71.87	42.43	8.79	8.47	17.55	42.51	108.31	60.80	62.26	100.41	91.30	7.00	43.01	42.36	4.13	32.52	
31-Jan	5.82	83.18	37.15	45.40	95.46	43.30	27.38	84.57	47.57	9.24	21.67	17.41	58.05	115.06	61.39	62.35	111.13	68.74	11.91	50.92	31.00	24.80	73.63	38.66
1-Feb	11.18	65.84	19.01	33.72	91.36	19.34	12.86	58.85	8.46	144.33	21.62	5.39	47.39	91.14	45.95	48.93	114.80	59.27	4.11	42.16	23.96	16.54	50.86	23.43
2-Feb	17.24	48.91	59.47	20.12	69.91	58.07	6.11	52.29	50.61	13.85	25.47	32.76	34.53	83.52	53.37	55.42	106.02	92.87	21.71	54.04	62.02	18.33	60.01	74.33
3-Feb	71.81	67.84	35.50	77.71	78.46	36.79	56.09	61.48	36.71	24.25	23.54	7.61	38.05	82.67	58.87	90.74	99.91	67.52	68.75	53.32	23.39	60.64	64.58	27.89
4-Feb	22.78	43.58	39.08	30.53	49.95	31.45	23.73	43.32	36.22	5.58	1.74	6.96	46.09	67.32	49.52	51.93	77.95	63.48	8.17	21.90	26.51	6.49	24.38	23.18
5-Feb	15.58	71.41	46.33	29.51	87.18	46.02	20.49	75.65	41.76	5.71	12.47	22.27	45.65	108.45	61.06	52.67	96.95	55.32	8.50	41.58	33.97	7.34	57.12	54.21
6-Feb	12.21	68.65	45.69	18.73	99.68	43.33	8.55	77.20	37.35	8.53	39.29	14.52	44.42	115.10	68.42	43.74	113.45	58.52	3.86	51.74	49.15	3.25	57.70	51.54
7-Feb	13.92	75.52	30.81	13.19	120.06	40.83	3.48	67.05	33.77	6.99	76.74	13.43	39.00	120.60	58.85	35.75	120.95	57.17	1.76	63.77	110.75	2.72	83.72	52.56
8-Feb	13.51	64.02	33.63	14.62	95.11	40.69	2.43			5.45	12.75	11.67	40.08	118.67	62.91	34.97	115.04	72.81				0.96	56.49	66.99
9-Feb	13.28	33.14		20.20	77.37	40.17		80.92	38.18	7.30	14.15	16.04	42.16	109.97	59.99	53.21	99.72	66.32		57.96	29.49	9.55	49.56	40.40
10-Feb	13.21	82.43	41.42	28.80	92.15	38.44	19.39	81.86	43.47	9.41	29.79	27.00	44.02	115.62	57.61	50.87	119.69	83.35	9.75	52.68	49.97	1.88	65.08	50.14

Delhi CO (Period 37 Days, from 05.01.2015 to 10.02.2015)

Time\Date	R K Puram			Punjabi Bagh			Mandir Marg			Anand Vihar			Civil Lines			IGI Airport			NSIT			IHBAS			DMS		
	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00	12:00-7:00	7:00-3:00	4:00-11:00
5-Jan	1.16	1.19	1.39	2.34	2.44	2.65	0.48	0.62	0.91	1.12	1.46	1.34	1.31	1.72	2.16	0.95	0.97	0.93									
6-Jan	1.35	1.37	1.74	2.33	2.43	2.60	0.62	0.93	1.17	1.32	1.61	1.57	1.50	1.79	2.02	0.98	0.99	0.95				4.63	3.51	4.55	0.70	0.72	0.78
7-Jan	1.69	1.56	1.84	2.64	2.30	2.97	1.03	1.19	1.27	1.52	1.88	1.88	2.03	2.31	2.86	1.01	0.99	0.98	0.62	0.60	0.64	3.91	5.32	4.60	0.68	0.84	0.90
8-Jan	1.30	1.52	1.76	2.33	2.71	2.26	0.97	1.59	1.71	1.30	2.10	1.76	2.10	2.50	2.55	0.99	0.99	0.97	0.64	0.53	0.54	4.10	2.62	2.65	0.52	1.51	1.29
9-Jan	1.30	1.51	2.13	2.28	2.62	2.41	0.76	1.50	1.54	1.24	1.87	1.97	1.78	2.05	2.19	0.98	1.00	0.96	0.45	0.53	0.66	3.66	4.92	3.86	0.75	1.21	0.97
10-Jan	1.17	1.13	3.29	2.31	2.49	3.66	0.64	0.93	2.38	1.47	1.73	3.09	1.53	1.85	3.90	0.99	0.93	0.92	0.48	0.49		2.66	4.60	5.40	0.71	0.74	1.30
11-Jan	1.56	1.40	2.51	1.97	2.52	3.48	1.53	0.94	1.95	1.28	1.41	2.19	2.84	2.18	2.91	0.99	0.94	0.97	0.60			4.01	4.04	5.66	0.68	1.05	1.05
12-Jan	1.53	1.46	1.99	1.72	2.81	2.78	0.96	1.44	1.74	1.69	1.58	2.50	2.33	2.66	3.75						0.75	23.32	3.88	4.39	0.75	0.85	1.03
13-Jan	1.48	1.45	2.05	2.33	2.34	3.04	1.47	1.55	1.76	2.08	2.45	3.00	3.09	3.33					0.60	0.79	0.59	6.84	6.46	4.15	0.96	1.44	1.03
14-Jan	1.17	1.66	2.42	1.73	2.63	3.30	0.78	1.20	1.57	1.08	1.86	2.44	2.07	2.01	2.85			0.90	0.54	0.50	0.88	2.14	4.32	1.82	0.72	0.98	1.38
15-Jan	2.10	1.59	1.43	2.03	2.59	3.04	1.25	1.44	2.45	2.05	2.80	5.33	2.70	3.13	4.80	0.97	0.95	0.95	0.87	0.66	0.99	3.12	3.43	3.94	0.83	1.01	2.58
16-Jan	1.28	1.35	2.01	2.27	2.38	3.46	1.02	1.15	2.00	1.74	2.73	4.62	2.36	2.79	4.53	0.97	0.94	0.91	0.65	0.58	1.53	5.02	3.91	3.50	0.86	1.00	1.45
17-Jan	1.24	1.38	4.89	1.67	2.29	5.52	1.17	1.08	2.42	1.32	1.70	5.63	2.74	2.89	5.28	0.92	0.97	0.94	1.02	0.57	1.86	3.24	4.11	3.10	0.77	0.70	1.21

18-Jan	1.54	1.23	3.60	1.76	2.32	4.58	1.34	1.08	1.74	3.53	2.35		4.25	3.20	5.27	0.99	1.01	0.96	1.02	0.53	1.54	3.05	0.49	0.35	0.23	0.28	0.71
19-Jan	1.35	1.48	1.70	2.50	2.11	3.15	1.31	1.23	1.85		1.60	2.00	2.28	2.46	3.14	0.94	1.01	0.95	1.22	0.58	0.58	0.24	0.38	0.34	0.16	0.32	0.52
20-Jan	1.21	1.30	1.31	2.16	2.59	2.44	0.80	1.00	1.09	1.11	1.74	1.79	2.01	2.18	2.52	0.96	0.94	0.97	0.53	0.50	0.53	0.28	0.43	0.36	0.07	0.42	0.49
21-Jan	1.26	1.34	1.65	2.43	2.74	2.75	0.73	1.17	1.40	1.51	1.83	2.26	1.65	2.14	2.60	0.96	0.93	0.96	0.53	0.56	0.70	0.32	0.47	0.34	0.15	0.30	0.45
22-Jan	1.37	1.44	1.16	2.51	2.34	2.30	1.01	1.30	0.95	1.73	1.67	1.14	1.99	1.98	1.59	0.95	0.93	0.97	0.63	0.70	0.55	0.29	0.37	0.38	0.10	0.35	0.26
23-Jan	1.07	1.38	1.46	2.35	2.18	2.56	0.44	0.85	0.72	1.30	1.49	1.64	1.17	1.58	1.59	0.89	0.95	0.95	0.49	0.56	0.50	0.31	0.39	0.32	0.18	0.38	0.53
24-Jan	1.08	1.13	1.34	2.38	2.44	1.05	0.61	0.66	0.74	1.12	1.42	1.29	1.66	1.73	1.80	0.97	0.94	1.00	0.47	0.49	0.51	0.46	0.23	0.27	0.17	0.31	0.80
25-Jan	1.07	1.20	1.56	0.76	1.00	1.51	0.55	0.77	1.08	0.98	1.45	1.72	1.75	1.95	2.33	0.98	0.96	0.94	0.47	0.46	0.48	0.37	0.34	0.35	0.82	0.87	2.22
26-Jan	1.23	1.19	1.55	0.99	0.86	0.97	1.00	0.82	0.96	1.54	1.66	1.23	1.63	1.74	1.88	0.92	0.95	0.97				0.33	0.43	0.36	0.76	0.99	1.00
27-Jan			1.49	1.02	0.79	0.97	0.73	0.94	0.79	1.26	1.73	1.65	2.03	2.25	2.28	0.96	0.97	0.99		0.49	0.54	0.28	0.52	0.37	0.86	0.94	0.80
28-Jan	0.90	1.09	1.88	0.88	0.77	1.50	0.67	0.63	2.59	1.22	1.40	2.39	1.63	1.63	2.31	0.95	0.94	0.92	0.47	0.50	0.67	0.32	0.45	0.32	0.83	1.00	0.89
29-Jan	1.46	1.16	1.54	0.80	0.71	1.26	0.75	0.85	0.94	1.21	1.18	1.73	2.07	2.28	2.60	0.99	0.98	0.91	0.65	0.57	0.77	0.36	0.42	0.25	0.82	1.02	1.01
30-Jan			1.56	0.78	0.87	1.20	0.91	0.66	0.86	1.36	1.59	2.22	1.96	2.00	2.18	0.98	0.99	0.88	0.75	0.60	0.57	0.40	0.41	0.29	0.66	0.57	
31-Jan	1.24	1.18	3.68	0.86	0.93	3.41	0.66	0.74	1.82	1.25	1.49	4.29	1.64	1.85	3.84	0.98	0.95	0.95	0.60	0.57	1.40	0.29	0.38	0.48	0.94	0.76	1.24
1-Feb			2.41	0.39	1.49	3.22	3.43	1.13	1.73	2.35	1.12	1.85	4.38	3.67	4.09	0.95	1.04	0.93	1.68	0.91	0.75	0.30	0.33	0.54	0.39	0.65	0.81
2-Feb	1.19	1.22	1.33	2.10	2.00	2.29	0.95	1.01	0.97	1.30	1.43	1.41	2.12	2.38	2.42	0.99	0.95	0.97	0.58	0.56	0.54	0.28	0.47	0.52	0.59	0.66	0.58
3-Feb	1.14	1.22	1.29	2.21	2.22	2.25	0.75	0.95	0.98	0.88	1.70	1.92	1.77	2.33	2.29	1.00	0.92	0.90	0.45	0.50	0.53	0.35	0.43	0.38	0.25	1.06	1.80
4-Feb			1.40	2.17	2.15	2.37	0.56	0.79	1.00	1.48	2.03	2.14	1.61	1.84	2.33	0.97	1.00	0.96	0.49	0.54	0.56	0.34	0.40	0.35	0.46	0.65	0.31
5-Feb	1.27	1.10	3.06	2.14	2.10	3.49	0.58	0.64	1.40	1.27	1.11	3.09	1.52	1.58	3.23	0.99	1.01	0.95	0.49	0.53	1.05	0.30	0.24		0.40	0.45	1.63
6-Feb	2.03	1.39	2.48	1.69	1.68	2.79	2.27	1.01	1.52	3.17	1.64	3.77	3.93	3.37	4.23	0.95	0.98	0.99	1.61	0.76	0.72	0.52	0.44	0.34	1.58		
7-Feb	2.43	1.42	3.36	1.74	2.12	2.70	1.19	1.03	1.71	1.75	1.63	3.08	2.92	2.46	3.49	0.97	0.98	0.91	1.04	0.69	0.47	0.29	0.37	0.40			
8-Feb	1.75	1.20	1.95	1.83	1.97	2.67	0.96			1.64	1.53	2.18	2.79	2.14	3.08	0.94	0.92	0.97				0.30	0.39	0.41			
9-Feb	1.24	1.33		2.06	1.89	2.41		0.32	0.93	0.74	1.24	1.76	2.03	1.87	2.51	0.90	0.97	0.92		0.45	0.62	0.39	0.36	0.34		1.24	1.35
10-Feb	1.34	1.17	1.88	2.33	2.00	2.85	0.56	0.62	1.29	0.90	1.07	1.81	2.14	2.20	3.09	0.97	0.98	0.93	0.60	0.58	0.60	0.24	0.27	0.77	1.07	0.91	1.03

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Ambient Air Quality Trend Analysis of NCR Region under National Ambient Air Quality Monitoring Programme (NAMP) during 2011 to 2013,
(Annual average concentration in $\mu\text{g}/\text{m}^3$)

S. No.	Name of state	Name of city	Location	Number of Stations	2011			2012			2013		
					SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀
1	Delhi	Delhi	Nizamuddin	10	4	47*	192*	4	42*	187*	4	42	165
2	Delhi	Delhi	ShahzadaBagh		5	56*	258*	5	53*	243*	4	61	265
3	Delhi	Delhi	Shahadra		5	54*	244*	5	56*	253*	4	62	246
4	Delhi	Delhi	Janakpuri		4	49*	216*	4	44*	246*	4	46	202
5	Delhi	Delhi	Siri Fort		4	47*	214*	5	48*	291*	4	43	181
6	Delhi	Delhi	N.Y. SCHOOL		4	74*	168*	5	78*	186*	4	83	186
7	Delhi	Delhi	Town Hall		6	75*	268*	7	87*	256*	4	98	219
8	Delhi	Delhi	Mayapuri Industrial Area		10	70*	225*	10	80*	268*	5	88	292
9	Delhi	Delhi	Pritampura		4	41*	217*	5	44*	206*	4	45	206
10	Delhi	Delhi	ITO		6	69*	196*	5	74*	264*			
11	Haryana	Faridabad	Regional Office, HSPCB	2	18	58*	159*	10	36	170*	11	22	179
12	Haryana	Faridabad	Shivalic Global Industries		23	50*	195*	13	41	197*	14	30	195
13	Haryana	Gurgaon	Gurgaon	3	-	-	-	-	-	-	-	-	-
14	Haryana	Mewat	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Haryana	Rohtak	Rohtak	1	-	-	-	-	-	-			
16	Haryana	Sonepat	Sonepat	3	-	-	-	-	-	-			
17	Haryana	Rewari	Rewari	3	-	-	-	-	-	-			
18	Haryana	Jhajjar	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Haryana	Panipat	Panipat	2	-	-	-	-	-	-			
20	Haryana	Palwal	Palwal	1	-	-	-	-	-	-			
21	Uttar Pradesh	Ghaziabad	M/s Atlas Cycles	2	32	40	250*	30	34	251*	26	35	289
22	Uttar Pradesh	Ghaziabad	Bulandshaar Road Industrial Area		30	38	212*	30	34	244*	25	33	281
23	Uttar Pradesh	Noida	Gee-Pee Engineering Works	2	10	45*	137*	9	37	139*	9	33	145
24	Uttar Pradesh	Noida	Regional Office, UPPCB		10	44*	139*	8	33	133*	8	29	138
25	Uttar Pradesh	Meerut	Begum Bridge	2	5	48*	126*	4	43*	129*	@	@	@
26	Uttar Pradesh	Meerut	Thana Railway Road		5	41*	119*	4	42*	129*	@	@	@
27	Uttar Pradesh	Bulandsahar	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28	Uttar Pradesh	Baghpat	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29	Uttar Pradesh	GautamBudh Nagar	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30	Uttar Pradesh	Hapur	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31	Rajasthan	Alwar	RIICO Pump House	3	13	22	173*	11	23	152*	12	22	271
32	Rajasthan	Alwar	Regional Office		11	22	175*	9	21	147*	7	19	255
33	Rajasthan	Alwar	Gaurav Solvex Ltd		13	22	294*	12	24	156*	12	22	277
Total				34									

Note: @ - data not available, NA - no station, '- stations sanctioned but not under operation

Minutes of the first meeting on 'Ambient Air Quality Monitoring in NCR' as per Hon'ble National Green Tribunal (NGT) Order dated 04.12.2014 on Application No. 21 of 2014 regarding Air Pollution in Delhi held at CPCB, on 26.12.2014

Venue of the meeting; Conference Room, 2nd floor, CPCB

Date and Time: 26.12.2014 at 11 AM

Agenda: Ambient Air Quality Monitoring in NCR

Record notes of discussion of the meeting held on 26th December, 2014 to finalize the Ambient Air Quality Monitoring plan in NCR Delhi as per Hon'ble National Green Tribunal (NGT) Order dated 04.12.2014 on Application No. 21 of 2014 regarding Air Pollution in Delhi.

In compliance to Hon'ble National Green Tribunal (NGT) Order dated 04.12.2014 on Application No. 21 of 2014 regarding Air Pollution in Delhi, a team of officials from CPCB, DPCC, MoEF, State Boards of Rajasthan, Haryana and Uttar Pradesh have been directed to collect ambient air quality samples from entire NCR Delhi at different intervals and times. In this regard, Dr. Sanjeev Agrawal, Scientist 'D' CPCB briefed the Chairman of the committee on existing monitoring in Delhi and NCR region and the cities covered in NCR within 50 km and 100 km radius of NCT of Delhi. He also expressed that as per NCR Planning Board tentative monitoring plan is to be established in 16 cities (9 cities in Haryana, 5 cities in U.P. and 2 cities in Rajasthan). Further he expressed that except the counter magnet area of NCR, the three states such as Haryana, Uttar Pradesh and Rajasthan has a vast area of 34, 144 sq. km as per Hon'ble NGT Order. With this introduction the state wise discussion on NCT and NCR, existing ambient air quality monitoring were invited from the representative of respective SPCB's from the Chairman of the committee. The officials from state agencies (SPCB's, /PCC's) attending the meeting are attached at Annexure. The agenda of the meeting is given below:

- i. Brief appraisal on existing monitoring stations and Air Quality data in NCR by Rajasthan SPCB, Haryana SPCB, Uttar Pradesh SPCB and DPCC
 - ii. Chalk out the modalities of the entire monitoring plan;
 - iii. Selection of cities for ambient air quality monitoring in NCR;
 - iv. Selection of location and number of location in the selected cities;
 - v. Selection of parameters to be monitored as per National Ambient Air Quality Standard 2009;
 - vi. Co-ordination with CPCB and other team members.
1. Dr. Rashid Hasan, Advisor MoEF & CC, Chairman of the committee suggested that each State Pollution Control Board appraise their respective existing ambient air quality monitoring to the Committee and also provide daily raw data of all the parameters monitored from 5th December to 4th January 2015 by 5th of January 2015 positively through e-mail in CPCB format so that an overview of Ambient Air Quality in NCT/NCR could be worked out and interim report could be submitted to Hon'ble NGT on time.
 2. Dr. A. B. Akolkar, Member Secretary, CPCB, suggested that the regular parameters may be continued to be monitored at all the locations at all the existing 21 manual operating stations as well 11 CAAQM stations operated by CPCB and DPCC. He opined that other parameters like NH₃, CO and O₃ may also be monitored at least at selected locations for at least two days in a week. He also suggested that in this existing monitoring system the 1st step would be to collect the regular data from existing AAQ monitoring stations and Ambient Air Quality Monitoring should be carried out at least once (snap shots) by all the State's/PCC's to get an overview in those cities where no AAQ monitoring stations exists and later on this will done on regular basis by outsourcing procedure.

3. Dr. A. B. Akolkar, Member Secretary, CPCB, further suggested that submission of interim report could be done in time to the Hon'ble Tribunal without any delay then seek some time from Hon'ble Tribunal to conduct monitoring by the respective SPCB's and PCC's (at least for a month) at more locations to expand and mechanize the ambient air quality monitoring network in more cities of National Capital Region (NCR) with the help of outside agencies (Outsourcing of AAQM). He also emphasized that sufficient number of Ambient Air Quality Monitoring Stations (AAQMS) should be established in NCR target area to get a clear picture of AAQ in National Capital Region (NCR).
4. Dr. Rashid Hasan, Advisor MoEF & CC & Dr. A. B. Akolkar, Member Secretary, CPCB, expressed their views that the area of AAQ monitoring of NCT Delhi may be expanded and AAQ should be conducted in circular grids (covering 60 to 100 km each side such as Panipat in North, Palwal and Kosi in south Haryana and Uttar Pradesh respectively, 60 km West of Delhi i.e. Bahadurgarh in Haryana and approx. 60-70 km East of Delhi NCT i.e. Meerut, Buladshahar in Uttar Pradesh) to cover more cities of NCR to study the impact of Air Pollution on the capital city from various sources (Circled grids state wise).
5. Dr. M. P. George, Scientist 'D', DPCC briefed the Committee on the status of air quality in Delhi. He informed that there are 6 CAAQM stations in Delhi out of which regular monitoring is being conducted in 4 stations. He also informed that out of 12 notified parameters 8 are being monitored in the CAAQMS except for B(a)P, Pb, As and Ni. He further stated that DPCC will provide the AAQ data of the above mentioned monitoring period through e-mail, in CPCB excel format.
6. Sh. Dinesh Kumar, Senior Scientist, Haryana SPCB, stated that there are 9 cities in NCR in Haryana state out of which 3 cities such as Faridabad, Gurgaon and Rohtak have regular CAAQ monitoring stations and Faridabad has both continuous and manual stations. A total of 9 parameters are being monitored in these three cities and data of the above mentioned monitoring period shall be provided through e-mail, in CPCB excel format, by 5th January, 2015. He also suggested that Palwal and Mewat (Neru city) may be excluded from the monitoring list at present as they are far away, approximately 60 km to 100km away from Delhi.
7. Sh. R. S. Yadav, Chief Executive Officer, Uttar Pradesh PCB, stated that there are 6 cities in NCR in U.P. state out of which 3 cities such as Ghaziabad, Noida and Meerut has regular manual monitoring stations. A total of 3 parameters are being monitored in the three cities and data of the above mentioned monitoring period shall be provided through e-mail in CPCB excel format by 5th January, 2015.
8. Dr. S. B. Khandelwal, Scientific Officer, Rajasthan PCB, stated that there are 2 cities in NCR in Rajasthan state out of which 1 city (Alwar) has regular manual monitoring stations. A total of 3 parameters (PM10, NO2, SO2) are being monitored in the city and data of the above mentioned monitoring period shall be provided through e-mail in CPCB excel format by 5th January, 2015. Dr. Sanjeev Agrawal, Scientist 'D', CPCB informed that the 4 monitoring locations (3 for manual and 1 for continuous) has already been finalized by CPCB for Bhiwadi as per CPCB guidelines. The present monitoring may be conducted in these selected locations in Bhiwadi.
9. Dr. Prashant Gargava, Scientist 'D', CPCB suggested the strategy for monitoring of 12 parameters and opined that initially we may provide the status of air quality with the current data with current logistics and then later appraise to the Hon'ble Tribunal with remaining air quality

parameters. He also expressed that the other parameters may also be outsourced by the respective State Boards/Committee's.

10. Sh. Abhijit Pathak, Scientist 'B', CPCB, informed that in CPCB B(a)P and NH₃ are not being conducted regularly. All the metals are being conducted in Delhi by CPCB and the data will be provided soon. Dr. S. K. Tyagi, Scientist 'D', CPCB suggested that CO may be monitored by NDIR method. He also suggested the names of a few laboratories such as SGS India Pvt. Ltd, Shriram Institute for Industrial Research, Bhagwathi Ana Labs Pvt. Ltd., Vimta Labs., TÜV SÜD South Asia. He further suggested that the critical parameters may be monitored and if outsourced then the laboratory may be asked to conduct monitoring in three consecutive days in a particular city then move on to the next city. Dr. Sanjeev Agrawal, Scientist 'D' PAMS division agreed to provide addresses of all the suggested firms to all the SPCB's/PCC's.
11. Dr. Sanjeev Agrawal, Scientist 'D', CPCB suggested that along with the parameters monitored the meteorological parameters could also be monitored and latest data need be obtained. Further he suggested that the monitoring may be conducted alternate days. While discussing on rates for 12 parameters, Sh. N. K. Gupta, Scientist 'D', CPCB special invitee, agreed to provide the rates on 12 parameters for ambient air quality monitoring which had been carried out in CEPI project.
12. It has been decided that Ambient Air Quality Monitoring should be carried out at least once (snap shots) by all the State's/PCC's to get an overview in those cities where no AAQ monitoring stations exists and later on this will done on regular basis by outsourcing procedure.
13. While discussing on source and ambient monitoring of Delhi and inspection team to collect Stack and Ambient Air Quality samples from and near the Indraprastha Thermal Power station and Badarpur Power Plant of Delhi, DPCC agreed to provide data on this issue to CPCB as per direction of Hon'ble NGT.
14. It was also decided that selection of locations and parameters along with the name of the cities under the National Capital Region (NCR) which need to be monitored for ambient air quality by all the states. It was further decided that after selection of cities by Haryana SPCB (10 cities in Haryana such as Panipat, Sonapat, Ballabgarh, Bahadurgarh, Rohtak, Rewari, Jajjar, Mewat, Palwal and Gurgaon), strategic monitoring plan shall be submitted to CPCB by Haryana SPCB within a short period of time.
15. Shri R. S. Yadav, agreed on less number of locations in existing network of ambient air quality in NCR region (Ghaziabad, Noida and Meerut having 2 stations in each cities) and expressed his views on monitoring strategies for remaining cities such as Greater Noida, Bulandshahar, Hapur and Bagpat. It was decided that selection of locations and parameters along with the name of the cities comes under the National Capital Region (NCR) as per NCR planning Board need to be monitored for ambient air quality in the state of Uttar Pradesh and strategic monitoring plan will be provided to CPCB by Uttar Pradesh SPCB within a short period of time.
16. Dr. M.P. George, DPCC explained that DPCC is running 04 continuous ambient air quality stations in NCT of Delhi and expressed his views on monitoring strategies for Delhi region. It was decided that the strategic monitoring plan will be provided to CPCB by DPCC and possibility could be explored to establish some more AAQ stations in NCT along with selection of locations and parameters under the National Capital Territory (NCT).

17. During the discussion, it was decided that only 2 problematic cities exist in Rajasthan (NCR) i.e., Alwar and Bhiwadi and Dr. S. B. Khandelwal, Scientific Officer, Rajasthan PCB, agreed to provide strategic monitoring plan to CPCB. The AAQ monitoring for Bharatpur city was also discussed and providing data for such sensitive area was agreed.
18. It was unanimously decided by each state agencies that the existing ambient air quality monitoring data during the period (5th December 2014 to 04th January 2015) will be provided to CPCB positively by 05th January 2015 in excel format provided by CPCB to the concerned SPCB's/PCC's (Haryana, Rajasthan, Uttar Pradesh and Delhi Pollution Control Committee).

Finally, *action points by each SPCB's & PCC's* summarizes that all the agencies (stakeholder) shall submit strategic plan for monitoring of AAQ along with number of locations and parameters selected in each major cities of the respective states within NCT of Delhi (covering approx. 1500 sq. km.) and beyond NCT of Delhi in a circular grids (Circular grids of each state fall in NCR in circled shaped of Capital city of Delhi) to cover National Capital Region (NCR) having an area of 34, 144 sq. km as per Hon'ble NGT Order. *The Action Points decided and finalized as below:*

Actions points by each SPCBs/PCCs/CPCB and actions be taken within a time line given by the Committee Constituted by MOEF&CC & Hon'ble NGT

<i>Sl. No.</i>	<i>Actions points to monitor Ambient Air Quality (AAQ) in NCR</i>	<i>Action to be taken by</i>	<i>Timeline for Action to be taken by different agencies</i>
1.	<ul style="list-style-type: none"> ➤ Ambient air quality data format in excel format to be mailed to all the four participating State Boards/PCC's; ➤ Rates for 12 parameters monitored for ambient air quality had been carried out under the CEPI project. 	PAMS Div. CPCB ESS Div. CPCB	30.12.2014 05.12.2014
2.	<ul style="list-style-type: none"> ➤ Strategic AAQ monitoring plan will be submitted to CPCB for 10 cities in Haryana such as Panipat, Sonapat, Ballabhgarh, Bahadurgarh, Rohtak, Rewari, Jajjar, Mewat, Palwal and Gurgaon along with selection of locations and parameters. 	HSPCB	10.01.2015
3.	<ul style="list-style-type: none"> ➤ Strategic AAQ monitoring plan will be submitted to CPCB for NCR in U.P. for cities such as Greater Noida, Bulandshahar, Hapur, Bagpat and Kosi etc. along with selection of locations and parameters and possibility to establish some more AAQ stations in Ghaziabad, Noida and Meerut (presently having only 2 stations in each cities) 	UP SPCB	10.01.2015
4.	<ul style="list-style-type: none"> ➤ Strategic AAQ monitoring plan will be submitted to CPCB for Delhi and possibility to establish some more AAQ stations in NCT along with selection of locations and parameters under the National Air Monitoring Programme (NAMP); ➤ DPCC to provide data to CPCB on Stack and Ambient Air 	DPCC DPCC	10.01.2015 05.01.2015

	Quality data from and near the Indraprastha Thermal Power station and Badarpur Power Plant of Delhi.		
5.	➤ Strategic AAQ monitoring plan to CPCB for 2 problematic cities in Rajasthan (NCR) i.e. Alwar and Bhiwadi and one sensitive area to cover Bharatpur city also.	Rajasthan SPCB	10.01.2015
6.	➤ Data of existing ambient air quality monitoring stations during the period (5 th December 2014 to 04 th January 2015) to be provided to CPCB by 5 th January 2015. ➤ Furthermore Ambient Air Quality Monitoring should be carried out at least once (snap shots) by all the State's/PCC's to get an overview in those cities where no AAQ monitoring stations exists and later on this will done on regular basis by outsourcing procedure.	HSPCB, RSPCB, UP SPCB & DPCC	05.01.2015
7.	➤ Regular parameters to be continued to monitor at all the locations in Delhi at all the existing 21 manual operating stations as well as 11 CAAQM stations operated by CPCB and DPCC. Other parameters like NH ₃ , CO and O ₃ also to be monitored at least at selected locations for at least two days in a week.	Air Lab CPCB & DPCC	05.01.2015
8.	➤ CPCB agreed to provide addresses of all the suggested firms to all the SPCB's/PCC's	PAMS CPCB	26.12.2014

Note: CPCB- Central Pollution Control Board, HSPCB-Haryana State Pollution Control Board, UPSPCB-Uttar Pradesh State Pollution Control Board, RSPCB-Rajasthan State Pollution Control Board, DPCC-Delhi Pollution Control Committee

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Annexure-1

List of participants for the committee meeting on 'Monitoring of Ambient Air Quality in NCR as per "Hon'ble NGT order in application no. 21 of 2014" on 26.12.2014

S. No.	Name, Designation & Organisation	Contact no./emails details
1.	Dr. Rashid Hasan, Advisor MoEF&CC, In-Chair	9891370656 hasan-mef@gmail.com
2.	Dr. A. B. Akolkar, Member Secretary, CPCB	9911110236, adaba.cpcb@nic.in
3.	Dr. Sanjeev Agrawal, Scientist 'D', CPCB	9891903524, sanjeevcpcb@yahoo.co.in sanjeevagrawal.cpcb@gmail.com
4.	Dr. M. P. George, Scientist D, DPCC	917593520, mohanpg@gmail.com
5.	Shri S. B. Khandelwal, SO, RSPCB	966757605, ro.alwar@gmail.com
6.	Shri R. S. Yadav, CEOC-4, UPPCB	876592507, ceo4@uppcb.com
7.	Shri Dinesh Kumar, Sr. Scientist HSPCB	941049907, hspcbssa@gmail.com
8.	Dr. Neeraj Chaturvedi, S.A. UPPCB Noida	9999000408
9.	Shri A. K. Sharma, Jr. En, UPPCB, Noida	
10.	Shri Rohit Sachan, AEE, UPPCB, Ghaziabad	871873191
11.	Shri A. Pathak , Scientist B, CPCB	9971566700
12.	Shri Prashant Gargava, SEE, CPCB	9990870087
13.	Dr. S.K. Tyagi, Scientist D, CPCB	9868956529, scsct@yahoo.co.in
14.	Shri. Tarun Darbari, Scientist 'C', CPCB	9999969389, tarundarbari@gmail.com
15.	Dr. Sanghita Roychoudhury, RA, CPCB	9871984779, rcsanghita@gmail.com
16.	Mr. Safi Ur Rehman, SA, CPCB	7838831374, rehman.s2013@gmail.com
17.	Ms. Razia Sultan, DEO, CPCB	9650939647, raziasultan22@gmail.com

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Central Pollution Control Board
Ministry of Environment, Forest & Climate Change, Govt. of India

Minutes of the Second Meeting on `Ambient Air Quality Monitoring in NCT Delhi & NCR' as per Hon'ble National Green Tribunal (NGT) Order dated 19.01.2015 on Application No. 21 of 2014 regarding Air Pollution in Delhi held at MoEF & CC on 11.02.2015

Venue of the meeting; Room No. P-225, 2nd Floor, MoEF & CC

Date and Time: 11.02.2015 at 3.00 PM

Agenda: Ambient Air Quality Monitoring in NCR

Record notes of discussion of the meeting held on 11th February, 2015 to finalize the Ambient Air Quality Monitoring plan at Borders of NCT of Delhi and in NCR as per Hon'ble National Green Tribunal (NGT) Order dated 19.01.2015 on Application No. 21 of 2014 regarding Air Pollution in Delhi.

In compliance to Hon'ble National Green Tribunal (NGT) Order dated 04.12.2014, a committee constituted earlier with a team of officials from CPCB, DPCC, MoEF, State Boards of Rajasthan, Haryana and Uttar Pradesh collected ambient air quality samples, analyzed from the entire NCR at different intervals and times and reported to the Hon'ble Tribunal on 19.01.2015. In continuation to that the Hon'ble NGT further directed that "all the directions issued by the Tribunal, particularly in relation to the vehicular pollution shall be carried out by all the concerned agencies without delay and default. The Expert Team (CPCB) shall take ambient air quality sample from all the Borders of Delhi and the adjacent area and submit the analysis reports before the Tribunal prior to the next date of hearing". The officials from state agencies (SPCB's/PCC's) attending the meeting are attached at Annexure. The agenda wise discussion and decisions taken in the meeting is given below:

Agenda 1. Actions to be taken by different stake holders as per the previous order and subsequent meeting dated 26.12.2014 held at CPCB, Delhi;

1. Dr. Sanjeev Agrawal, Scientist 'D' CPCB briefed the committee that as per last meeting dated 26.12.2014 and informed that the complete data for 8 parameters and the strategic ambient air quality monitoring plan for cities under NCR has not been received from different stake holders. Dr. Rashid Hasan, Advisor MoEF & CC suggested that all SPCBs should submit complete data for 8 parameters as well as the strategic plan for regular ambient air quality monitoring in NCR region.
2. Shri S. B. Khandelwal, SO, RSPCB informed that the three air quality monitoring stations at Bhiwadi will be started shortly at the sites finalized by CPCB. He also agreed that one week monitoring will be conducted at Bharatpur and data will be sent to CPCB.
3. Dr. Neeraj Chaturvedi, S.A. UPPCB Noida informed that one more air quality monitoring station with PM_{2.5} has been started recently by UPPCB in Noida and that station will be upgraded to three regular parameters such as SO₂, NO₂, PM₁₀.
4. Ms. Sapna Srivastava, Asst. Scientific Officer, UPPCB, Ghaziabad agreed that the monitoring will be conducted at the Apsara Border (NH-24 GT Road) and not in Loni border and the data of already functional air quality monitoring station at Noida Regional Office will be furnished as the station is in the border itself within specified kilometers/radius
5. Dr. P.K.M.K. Das, Scientist 'C', HSPCB, agreed to establish regular monitoring station under NAMP at Jhajjar, Mewat, Daruhera, Hissar, Sonapat and Panipat.

Agenda 2. As per the recent order dated 19.01.2015 with respect to parking and air pollution on metalled roads in Delhi, establishment of ambient air quality monitoring (AAQM) stations and procurement of minimum 1 week data from Lajpat Nagar and Karol Bagh area of Delhi;

6. Dr. Sanjeev Agrawal informed that during hearing on 19.01.2015, Hon'ble NGT searched for ambient air quality data with respect to parking lot at Lajpat Nagar and Karol Bagh. In this regards, Dr. D. Saha, Scientist 'D' pointed out that parking lot monitoring is not ambient air quality monitoring. Further Dr. M. P. George, Scientist

'D', DPCC suggested that Hon'ble NGT verbally asked the air quality data for Lajpat Nagar and Karol Bagh. It was therefore, decided that the air quality monitoring will not be performed at these locations.

Agenda 3. Finalization of interim report and period of data to be included therein;

7. Dr. Sanjeev Agrawal suggested that another one month data may be submitted to CPCB and to explore the possibility to insert in the final report which is to be submitted to Hon'ble NGT before the next date of hearing. Dr. Rashid Hasan suggested that air quality data for the cities attempted earlier including cities left earlier from 06.01.2015 to 10.02.2015 may be given by all SPCBs/PCCs to CPCB (CPCB data format) by 16th February 2015 for finalization of report.

Agenda 4. Ambient air quality monitoring at all the Borders of NCT of Delhi flanking National Capital Region (NCR);

8. Dr. Rashid Hasan, Advisor MOEF&CC explained that the monitoring will be conducted by the Expert Team as indicated in the Hon'ble NGT Order which means a committee constituted during the first meeting with a team of officials from CPCB, DPCC, MoEF, State Boards of Rajasthan, Haryana and Uttar Pradesh.
9. Dr. Sanjeev Agrawal briefed the committee that as per Transport Deptt. (Statistics Report), there are 18 major Borders in National Capital Region (NCR), however, as per Hon'ble Tribunal Order the committee may consider AAQ monitoring at major seven Borders where National Highways approaching to respective states like Haryana, U.P., and across Haryana -Rajasthan Border.
10. Dr. P.K.M.K. Das, Scientist 'C', HSPCB, informed that as there are three regular monitoring stations one each at Faridabad, Gurgaon and Rohtak within the range of 6 Km from NCT border and may be considered as Border Air Quality data. In this regard, Dr. Sanjeev Agrawal suggested that as per the AAQ guidelines the air quality should be within the range of 1-2 km. Dr. D. Saha suggested that, air quality monitoring will be conducted by respective SPCBs within 1 km range from the check post and not on the roadside and the distance from the check post shall be mentioned by the monitoring team. It was finally decided by the expert committee that air quality monitoring at Border's of Delhi shall be conducted as per the table given below:

Sl. no.	Name of Road with number National Highway/ State Highway	Location of monitoring near to Delhi border	Monitoring to be conducted by the agencies
1	NH-24 bypass road : Delhi-Moradabad	DPCC at Anand Vihar UP PCB near U.P. Gate (Hapur Moradabad Road)	DPCC U.P. SPCB
2	NH-2 : Delhi-Agra	Badarpur (Mathura Road)	Haryana SPCB
3	NH-236 : Mehrauli-Gurgaon	Gurgaon (Jaipur Road)	Haryana SPCB
4	NH-10 : Rohtak Road	Tikri Kalan (Bahadurgarh Road)	Haryana SPCB
5	NH-1 : Delhi-Ambala Road	Narela / Alipur Road (Panipat Road)	Haryana SPCB
6	NH-24 Main GT Road	Dilshad Garden (J&K Pocket) road approaching to Mohan Nagar (Apsara theatre)	U.P. SPCB CPCB (Dilshad Garden)
7	Noida-Greater Noida Expressway	Boarder near toll, Road towards Greater Noida-Dadri	U.P. SPCB

11. The date of monitoring was finalized by the committee as 16th and 17th February 2015 and data will be submitted to CPCB by 19th February, 2015 12.00 PM. The parameters to be monitored were SO₂, NO₂, PM₁₀, PM_{2.5} as Dr. R. C. Srivastava, Scientist 'C', CPCB pointed out that all the 8 parameters cannot be monitored at check post in such short period of time.

Agenda 5. Inspection of hot mixture plants in NCT of Delhi by a team of DPCC and CPCB;

12. Regarding inspection of Hot mixture plants running in Delhi, Dr. Sanjeev Agrawal suggested that, Mr. A. Chattopadyay, Scientist D, CPCB may coordinate with DPCC and submit the report to PAMS Division, CPCB by 19th February 2015.

Agenda 6. Comments on Capping of cars by NCT of Delhi, DPCC and CPCB;

13. Upon discussion on Capping of cars by NCT of Delhi, Dr. Rashid Hasan suggested that DPCC will provide comments to CPCB through email by 16th February, 2015.

Finally, actions points to monitor Ambient Air Quality (AAQ) Monitoring along with time line is attached (**Annexure-I**).

The meeting ended with thanks to the Chair

Actions points to monitor Ambient Air Quality (AAQ) Monitoring in NCT of Delhi & NCR by each SPCBs/PCCs/CPCB along with time line given by the Committee Constituted by MOEF&CC & Hon'ble NGT

Sl. No.	Actions points to monitor Ambient Air Quality (AAQ) in NCR	Action to be taken by	Timeline for Action to be taken by different agencies
1.	➤ Ambient air quality data format in excel format to be mailed to all the four participating State Boards/PCC's;	PAMS Div. CPCB	12.02.2015
2.	➤ Strategic AAQ monitoring plan will be submitted to CPCB for 10 cities in Haryana such as Panipat, Sonipat, Ballabhgarh, Bahadurgarh, Rohtak, Rewari, Jajjar, Mewat and Gurgaon along with selection of locations and parameters.	HSPCB	19.02.2015
3.	➤ Strategic AAQ monitoring plan will be submitted to CPCB for NCR in U.P. for cities such as Greater Noida, Bulandshahar, Hapur, Bagpat etc. along with selection of locations and parameters and possibility to establish some more AAQ stations in Ghaziabad, Noida and Meerut (presently having only 2 stations in each cities)	UP SPCB	19.02.2015
4.	➤ Strategic AAQ monitoring plan will be submitted to CPCB for Delhi and possibility to establish some more AAQ stations in NCT along with selection of locations and parameters	DPCC	19.02.2015
5.	➤ Strategic AAQ monitoring plan will be submitted to CPCB for 2 cities in Rajasthan (NCR) i.e. Alwar and Bhiwadi and one sensitive city i.e. Bharatpur.	Rajasthan SPCB	19.02.2015
6.	➤ Ambient air quality data for all the parameters such as SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , CO, O ₃ , NH ₃ , C ₆ H ₆ , B(a)P and metals (Pb, Ni & As) whichever be monitored for existing ambient air quality monitoring stations in NCR during the period (05 th January 2015 to 10 th February 2015) to be provided to CPCB.	HSPCB, RSPCB, UP SPCB, DPCC & Air Lab CPCB	16.02.2015
7.	➤ Ambient air quality data for all 7 major Borders of NCT of Delhi (Four borders will be monitored by Haryana SPCB and three borders will be by U.P. SPCB) for 16 th and 17 th February, 2015 and data to be provided to CPCB.	HSPCB & UP SPCB,	19.02.2015
8.	DPCC & Air lab CPCB shall provide the data of existing AAQM stations (Anand Vihar-DPCC and Dilshad Garden-CPCB) at NCT Border for 16 th and 17 th February, 2015 to CPCB.	DPCC & Air Lab CPCB	19.02.2015
9.	➤ Joint inspection report on Hot mixing plant running in Delhi shall be provided to CPCB.	DPCC & SSI Div., CPCB	19.02.2015
10.	➤ Comments on Capping of cars in Delhi shall be provided by DPCC to CPCB.	DPCC to first provide CPCB	16.02.2015

Note: CPCB- Central Pollution Control Board, HSPCB-Haryana State Pollution Control Board, UPSPCB-Uttar Pradesh State Pollution Control Board, RSPCB-Rajasthan State Pollution Control Board, DPCC-Delhi Pollution Control Committee

List of participants for the committee meeting on 'Monitoring of Ambient Air Quality in NCR as per "Hon'ble NGT order in application no. 21 of 2014" on 11.02.2015

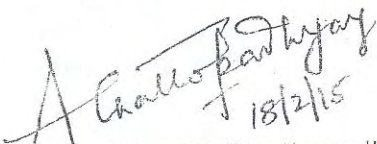
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Inspection Report of alleged Hot Mixture Plants in and around Vikas Marg Area of Delhi

As per Order of National Green Tribunal, Principal Bench, New Delhi dated January 19, 2015 in regard to Appeal No 21/2014 and M.A. No 37/2015 (in the Matter of Vardhaman Kaushik Vs. Union of India & Others), a inspection was made on February 18, 2015 in and around the Vikas Marg, specially the areas, as reported by the Applicant, i.e., Opposite Nirman Vihar Metro Station, SBI Rajdhani Enclave, PNB Preet Vihar and Bihari Colony for ascertaining the existence of any such Hot Mixture Plant and associated problems, if any, by Shri Abhijit Chattopadhyay, Scientist D, Ms Deepa Chaudhary, SRF of Central Pollution Control Board, and Shri M.I Siddiqui, Environmental Engineer of Delhi Pollution Control Committee.

- ❖ The team visited all the areas by moving into the Roads, Lanes and by lanes to find the existence of any **Movable/Immovable Hot Mixture Plant** and see the problems of the area, especially to the residents and the other establishments. However, no such establishments could be seen by the team during the inspection.
- ❖ First visit was made to **Nirman Vihar and Opposite Nirman Vihar** Area i.e. Swasthya Vihar and discussed with different residents of the area and also contacted Swasthya Vihar Club, Ministry of Health Co-operative House Building Society (Shri Krishna Nand Club Office Manager). It was informed that 'no such activity' in this locality has been noticed by them in near past'.
- ❖ Next visited to **New Rajdhani Enclave** and contacted the Association members - Shri Satyapal, President and Shri Vishnu Gupta, Secretary of the Association and also Shri Nayyar, Active Member of the Association. Their opinion was also in the same direction that they have not noticed this type of activities.
- ❖ Then visited to **Preet Vihar** and contacted to the members of Residents Welfare Association - Shri M.K Sikhri President and Shri Arun Bansal, Secretary of Residents Welfare Association and also contacted some local residents of the locality and got informed that 'no such activity' in this area has been noticed by them in near past'.
- ❖ Last of all visits was made to **Bihari Colony**, which is far apart from the above areas and near to Shahdara. There also the team contacted the residents of the locality for getting the first hand information regarding the operation of Hot Mixture Plant. Shri Subash Ahuja Hardware Shop Owner, Shri R.B Sharma Owner of Upkar Property Dealer in Bihari Colony informed that they have not seen any such activities which may cause nuisance to the area.


Shri Abhijit Chattopadhyay
Scientist D, CPCB


Shri M.I Siddiqui
EE, DPCC


Ms Deepa Chaudhary
SRF, CPCB