

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION No. 2027
TO BE ANSWERED ON 19.12.2022

Pollution by Green Crackers

2027. SHRI VISHNU DAYAL RAM:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether the green crackers have severely compromised the Air Quality Index of NCR;
- (b) the details of the decrease in particulate matter in years which experienced burning of normal crackers versus burning of green crackers 2022;
- (c) whether the Government has any plans to ban the sale of all types of crackers in the future; and
- (d) whether the Government accounted for the emissions caused by green crackers in its net zero carbon ambitions, if so, the percentage of carbon emissions are caused by green crackers?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI ASHWINI KUMAR CHOUBEY)

(a) & (b)

There is no such evidence available regarding severely compromised Air Quality Index of NCR due to the green crackers. Air Quality Index Status (Number of days) of major cities of NCR including Delhi during June to November 2022 is given as **Annexure-I**. The months of October and November 2022 have been one of the best for Delhi-NCR in respect of the average Air Quality Index (AQI) during the last 7 years.

The concentrations of PM10 and PM2.5 recorded in Delhi on one day before Diwali and Diwali day during 2018 to 2022 is given as **Annexure-II**. Variations in concentrations among the years are highly dependent on meteorology, atmospheric boundary layers (Mixing height) inversion etc. and influence of other sources in addition to firecrackers.

(c) & (d)

There is no proposal of banning firecrackers. However, Hon'ble Supreme Court limited the manufacturing and sale of conventional firecrackers and allowed only the crackers with reduced emissions (minimum 30% less emission of particulate matter) as Green Crackers. Green firecrackers based on new and improved formulation are expected to decrease source emissions with specific reference to particulate matter and gases including CO₂ vis-a-vis conventional firecrackers.

Annexure -I

Air Quality Index Status (Number of days) of major cities during June to November 2022

City	Month in 2021	Number of days in different categories of AQI						Good & Bad days	
		Good	Satisfactory	Moderate	Poor	Very Poor	Severe	Good Days	Bad days
		(0–50)	(51–100)	(101–200)	(201–300)	(301–400)	(>401)		
Delhi	June		3	14	10	3		17	13
	July		25	6				31	0
	August		18	13				31	0
	September	1	11	18				30	0
	October	2	4	8	10	7		14	17
	November				12	15	3	0	30
Ghaziabad	June		2	13	11	4		15	15
	July	2	21	7				30	0
	August	2	17	12				31	0
	September	3	11	16				30	0
	October	5	1	6	13	6		12	19
	November			5	13	10	2	5	25
Noida	June		2	13	10	5		15	15
	July	1	24	5				30	0
	August	3	19	9				31	0
	September	1	14	15				30	0
	October	3	3	8	11	6		14	17
	November			6	13	9	2	6	24
Gurugram	June		1	13	12	4		14	16
	July	2	14	12	2			28	2
	August	2	16	13				31	0
	September	1	8	21				30	0
	October	4	2	8	11	6		14	17
	November			1	18	9	2	1	29
Faridabad	June		3	16	9	2		19	11
	July		17	13				30	0
	August	1	5	25				31	0
	September	2	11	17				30	0
	October	4	2	10	8	7		16	15
	November			1	15	12	2	1	29

Annexure –II**Concentrations of PM10 and PM2.5 recorded in Delhi on one day before Diwali and Diwali day during 2018 to 2022:**

Year wise (2018-2022) comparison of PM10 and PM2.5 during Pre-Diwali days and Diwali Day															
Year/ Day	2018			2019			2020			2021			2022		
	Dates	PM2.5	PM10	Dates	PM2.5	PM10	Dates	PM2.5	PM10	Dates	PM2.5	PM10	Dates	PM2.5	PM10
1 Day Before Diwali	06-Nov	149	290	26- Oct	173	315	13- Nov	235	399	03- Nov	176	328	23- Oct	146	274
Diwali day	07-Nov	324	432	27- Oct	284	391	14- Nov	483	645	04- Nov	447	575	24- Oct	208	308