

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UN-STARRED QUESTION NO. 1065
TO BE ANSWERED ON 22.11.2019

Pollution Level after Diwali

1065. SHRI RAJESH VERMA:

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

- (a) whether the environment of Delhi and National Capital Region (NCR) deteriorates after Diwali during the last few years and if so, the details thereof;
- (b) the works carried out so far by the Government to check it;
- (c) whether the Government has formulated any action plan to deal with such situation in the future; and;
- (d) if so, the details thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI BABUL SUPRIYO)

(a) As per available data, the environment of Delhi and National Capital Region (NCR) deteriorates with respect to particulate matter (PM_{2.5} and PM₁₀) particularly in the winter months after Diwaliduring the last few years. The Air Quality Index(AQI)in Delhi for seven days before andafter Diwali dayfor the years 2016 to 2019is on Annexure-I. The increase in level of air pollution occurs due to adverse meteorological conditions like low temperature, poor wind speed and low mixing height apart frombursting of firecrackers and other major contributing factors*inter alia* from vehicular emission, industrial emissions, biomass / stubble burning, municipal waste burning and dust suspension.

(b) The works carried out by the Government to check environmental pollution after Diwali, *inter alia*, include; prohibition of manufacture, sale or use of fire-crackers exceeding the noise level as prescribed in the Noise Rules, 2000with safety regulations prescribed by Petroleum and Explosives Safety Organization (PESO), development of eco-friendly firecrackers or green firecrackers with 20–30% reduction in pollution throughCouncil of Scientific & Industrial Research (CSIR)-National Environment Engineering Research Institute (NEERI), manufacture and sale of green firecrackersfor Diwali as per the guidelines of the Supreme Court, banning of chemicals like Barium/Lithium/Arsenic/Antimony/Lead/Mercury in the firecrackers,licensing of fireworks industries for new formulations of green crackers by Petroleum and Explosives Safety Organisation (PESO), advisories for noise monitoring on the occasion of Diwali, prohibition of the use of fireworks between 10.00 p.m. and 6.00 a.m., publicity regarding the ill effects of the firecrackers and awareness programme, Clean Air Campaign” last year to check air polluting activities pre and post Diwali, ‘Harit Diwali- Swasth Diwali’ campaign, promotion

of peoples participation and awareness for environmental conservation through Green Goods Deedsetc. apart from various works carried out to check air pollution in Delhi and NCR.

(c) & (d) Ministry in consultation with CSIR-NEERI, PESO and CPCB has formulated action plan to be adopted to tackle the pollution problem which occurs due to firecrackers during Diwali. The actions suggested is development of Reduced Emission fire-crackers which *inter alia* include (i) definition and formulation of Green Fire crackers (including new and improved formulations) as proposed by CSIR-NEERI, (ii) Research & development of new and improved formulations for green crackers (for popular brands of light and sound emitting crackers), (iii) stakeholders consultations and demonstration to firework manufacturers, PESO and CPCB, (iv) establishing baselines, assessment of Barium levels in improved formulations, comparative evaluation of green crackers *vis-a-vis* conventional crackers etc. (v) establishment of emission testing facility for firecrackers, (vi) setting up Raw materials characterization facility to ensure usage of raw materials/chemicals of acceptable quality.

Annexure – I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF LOK SABHA UNSTARRED QUESTION NO. 1065 DUE FOR REPLY ON 22/11/2019 REGARDING POLLUTION LEVEL AFTER DIWALI RAISED BY SHRI RAJESH VERMA, HON'BLE MEMBER OF PARLIAMENT

Air Quality Index in Delhi - before and after Diwali for the years 2016 – 2019

Year/Day	2016		Prominent Pollutant	2017		Prominent Pollutant	2018		Prominent Pollutant	2019		Prominent Pollutant
7 Day Before	23-Oct	318	PM2.5, PM10	12-Oct	268	PM2.5, PM10	31-Oct	358	PM2.5, PM10	20-Oct	238	PM2.5, PM10
6 Day Before	24-Oct	306	PM2.5, PM10	13-Oct	285	PM2.5, PM10	01-Nov	393	PM2.5, PM10	21-Oct	249	PM2.5, PM10
5 Day Before	25-Oct	210	PM2.5, PM10	14-Oct	314	PM2.5	02-Nov	370	PM2.5, PM10	22-Oct	207	PM2.5, PM10
4 Day Before	26-Oct	291	PM2.5, PM10	15-Oct	289	PM2.5, PM10	03-Nov	340	PM2.5, PM10	23-Oct	242	PM2.5, PM10
3 Day Before	27-Oct	355	O3, PM2.5	16-Oct	290	PM2.5, PM10	04-Nov	171	PM2.5, PM10, Ozone	24-Oct	311	PM2.5, PM10
2 Day Before	28-Oct	397	PM2.5, PM10	17-Oct	306	PM2.5, NO2	05-Nov	426	PM2.5, PM10	25-Oct	284	PM2.5, PM10
1 Day Before	29-Oct	404	PM2.5, PM10	18-Oct	302	PM2.5, PM10	06-Nov	338	PM2.5, PM10	26-Oct	287	PM2.5, PM10
Diwali day	30-Oct	431	PM2.5	19-Oct	319	PM2.5, PM10	07-Nov	281	PM2.5, PM10	27-Oct	337	PM2.5, PM10
1 Day after	31-Oct	445	PM2.5, PM10	20-Oct	403	PM2.5, PM10	08-Nov	390	PM2.5, PM10	28-Oct	368	PM2.5, PM10
2 Day after	01-Nov	389	PM2.5, PM10	21-Oct	389	PM2.5, PM10	09-Nov	423	PM2.5	29-Oct	400	PM2.5, PM10
3 Day after	02-Nov	432	PM2.5, PM10	22-Oct	329	PM2.5, PM10	10-Nov	405	PM2.5, PM10	30-Oct	419	PM2.5
4 Day after	03-Nov	432	PM2.5, PM10	23-Oct	306	PM2.5, PM10	11-Nov	401	PM2.5, PM10	31-Oct	410	PM2.5
5 Day after	04-Nov	372	PM2.5, PM10	24-Oct	309	PM2.5, PM10	12-Nov	399	PM2.5, PM10	01-Nov	484	PM2.5
6 Day after	05-Nov	485	PM2.5, PM10	25-Oct	344	PM2.5, PM10	13-Nov	409	PM2.5, PM10	02-Nov	399	PM2.5, PM10
7 Day after	06-Nov	497	PM2.5, PM10	26-Oct	321	PM2.5, PM10	14-Nov	312	PM2.5	03-Nov	494	PM2.5
