

# SAFAR-India (DELHI)

System of Air Quality and Weather Forecasting and Research (SAFAR)  
Indian Institute of Tropical Meteorology, Pune  
Ministry of Earth Sciences

## Air Quality Forecast for Diwali Period-2023 (Issued on 11<sup>th</sup> November 2023)

### Air quality on Diwali Day

*The overall air quality of Delhi is in the Poor category on 11<sup>th</sup> and is predicted to remain in VERY POOR on 12<sup>th</sup> and 13<sup>th</sup> with zero fire cracker emissions. If Diwali fire cracker emissions (50% increase in emissions) are considered then air quality is likely to touch LOWER END of SEVERE category on 12<sup>th</sup> Nov, the Diwali day.*

### DIWALI EMISSION SCENARIOS

The Air Quality Forecast for the Diwali-2023 period was issued based on the indigenously developed SAFAR-Air Quality Forecasting Framework. The forecast is based on the following two model scenarios:

- (A) SCENARIO: 0%: No additional Fire Cracker related Emissions.
- (B) SCENARIO: Additional 50% Firecracker emissions on Diwali day.

### IMPORTANT NOTE

- (1) Above model forecast does not take into account the impact of any control measures.
- (2) In both scenarios, stubble emissions are included.

SAFAR-AQI Forecast-DELHI NCT			
Date	11 <sup>th</sup> Nov.	12 <sup>th</sup> Nov.	13 <sup>th</sup> Nov.
50 % Increase due to Firecracker emissions			
PM 2.5 concentration( $\mu\text{g}/\text{m}^3$ )	166	261	218
0 % Firecracker emissions			
PM 2.5 concentration( $\mu\text{g}/\text{m}^3$ )	92	195	212

