

# SAFAR-India (Delhi)

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## Air Quality Forecast-DELHI CITY

(ISSUED on 12<sup>th</sup> June 2019)

### SUMMARY

#### SAFAR-AIR QUALITY FORECAST-2019:

OVER ALL AIR QUALITY IN DELHI IS IN POOR CATEGORY WITH PM10 AS THE LEAD POLLUTANT. AQI HAS SIGNIFICANTLY IMPROVED FROM YESTERDAY'S CONDITION OWING TO HIGH VENTILATION COEFFICIENT AND SETTLING OF COARSER DUST PARTICLES AS EXPECTED. A PLUME FROM SEVERE DUST STORM FORM AFGHANISTAN AND PAKISTAN IS PRESENTLY LOCATED IN NORTH WEST ARABIAN SEA AND PAKISTAN. DUE TO THE DEVELOPMENT OF SEVERE CYCLONIC STORM 'VAYU' WHICH IS PULLING AIR MASS FROM THAT REGION, THE TRAJECTORY OF DUST PLUME IS MODIFIED AND DUST IS SIGNIFICANTLY DILUTED AS SHOWN IN SAFAR MODEL OUTPUT BELOW. DELHI IS LIKELY TO BE OUT OF HEAVY AQ EPISODE. BUT AQI IS PREDICTED TO REMAIN HIGH IN POOR CATEGORY FOR NEXT TWO DAYS. WESTERN DISTURBANCES WITH THUNDERSTORMS IS LOOMING LARGE. GUSTY WINDS MAY. FURTHER LEAD TO LOCAL DUST LIFTING IF LOCAL HEAT WAVE CONDITION CONTINUE TO PREVAIL RESULTING IN INCREASE LEVELS OF COARSER PARTICLES, PM10.

#### FACTORS AFFECTING DELHI AIR QUALITY

##### -Three INDICATORS: Favorable, OK and Unfavorable for AQ

- **LOCALIZED DUST LIFTING: High -Unfavorable for Air Quality**
- **LONG DISTANCE DUST STORM IMPACT: Moderate -Favorable for Air Quality**
- **SURFACE WIND SPEED: High: Unfavorable for Air Quality**
- **SURFACE WIND DIRECTION: Easterly - Favorable**
- **RELATIVE HUMIDITY: Moderate - Favorable for Air Quality**
- **INVERSION LAYER HEIGHT: High - Favorable for Air Quality**
- **TEMPERATURE: High - Unfavorable**

