

## **New Year's Eve Air quality over the NCR during the General Community Quarantine, 2020**

**January 1, 2021, IESM, UP Diliman** - Despite the prohibition on the use of firecrackers and pyrotechnics in the National Capital Region, the New Year's Eve air quality over the NCR during the General Community Quarantine has shown improvement compared to previous years, even though peaks were observed during the first two to three hours onset of the New Year's Eve celebration.

Based on the data from the AirQ-Met<sup>1</sup>, as the midnight approaches, the Air Quality Index (AQI) values for both PM<sub>10</sub> and PM<sub>2.5</sub> gradually increase with the peak values recorded from 1 am to 2 am. AQI is an index that tells how clean or polluted the air is and being used by the government in reporting and communicating the air quality status and its associated possible adverse health effects to the public. The higher the AQI value, the more polluted the air quality is.

For the PM<sub>10</sub> AQI values, North Caloocan Station recorded the highest values among all the stations, from 1 am to 2 am, the AQI values range from 112-143 which are considered to be unhealthy for sensitive groups. While the other stations have recorded AQI values that are considered to pose moderate health risk concern for some people, Marikina station recorded moderate AQI values from 12 midnight to 3 am which ranges from 52-85, Paranaque station recorded moderate AQI values from 12 midnight to 1 am with values ranging from 60-63, San Juan station recorded moderate AQI values from 1 am to 3 am with values ranging from 52-65 while Taguig Station recorded moderate AQI value of 61 at 2 am.

For the PM<sub>2.5</sub>, the recorded AQI values for Muntinlupa station are still considered to be of satisfactory air quality with little to no risk, however, an increasing value is noted, with the peak AQI value of 45 is recorded at 1 am.

The AQI values recorded this year are much lower compared to last year, where some stations even recorded AQI values that are deemed hazardous, the lower AQI values can be attributed to the issuance of a firecracker ban by the local government over some cities in Metro Manila together with the existing community quarantine guidelines being imposed to ensure the safety of the public due to the COVID-19 pandemic.

According to the US EPA, Particulate Matter or PM are tiny solid or liquid particles that are suspended in the air such as dust, soot, dirt or smoke. PM with diameter of 10 microns or less are considered as PM<sub>10</sub>, while PM with diameter of 2.5 microns or less are considered as PM<sub>2.5</sub>. These PM are inhalable particles and may cause harm to human health since these can penetrate deep in the lungs and even get in the bloodstream causing both respiratory and cardiovascular ailments.

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<sup>1</sup> AirQ-Met is an application developed by the BP Integrated technologies Inc. (BPIT) and Environmental Management Bureau – National Capital Region (EMB-NCR) that provides the real-time hourly status of different air pollutants from the air quality monitoring stations owned and operated by the EMB-NCR