DENR-EMB CONDUCTS 126-HOUR TRAINING ON COMPREHENSIVE METEOROLOGY AND ITS IMPACT TO AIR QUALITY

The Environmental Management Bureau (EMB) under the Department of Environment and Natural Resources (DENR), in partnership with the University of the Philippines Institute of Environmental Science and Meteorology (UP-IESM), conducted the 126-hour Training on Comprehensive Meteorology and its Impact to Air Quality via Zoom Meeting Platform from October to December 2021.

The 3-month training capacitated selected EMB technical staff on the basic and advanced concepts on meteorology, and in the assessment of the effects of meteorology on the dispersion of air pollutants and of the Air Dispersion Modeling (ADM) in relation to Environmental Compliance Certificate (ECC) conditions and airshed designation of attainment and non-attainment areas.

Pursuant to Annex 2 Item 1 of EMB Memorandum Circular 2007 - 003, large and environmentally significant sources are required to conduct ADM to demonstrate their compliance with DAO 2000 - 81 "National Ambient Air Quality Standards for Source Specific Air Pollutants from Industrial Sources / Operations."

As such, the EMB has published EMB MC 2008 – 003, or the Guidelines for Air Dispersion Modelling, for the hierarchal approach to ADM in the Philippines. ADM predicts the 98 percentile Ground Level Concentrations (GLCs) of a source's emission such as Carbon Monoxide (CO), Sulfur Dioxide (SO_2), Nitrogen Dioxide (NO_2), Total Suspended Particulates (TSP), Particulate Matter 10 (PM_{10}), and Particulate Matter 2.5 ($PM_{2.5}$) which are compared against the national ambient air standards.

According to AQMS Chief, Engr. Jundy T. Del Socorro, meteorological data is one of the most important inputs into any air dispersion modelling. Ground Level Concentrations of air pollutants are primarily affected by wind direction and wind speed (for transport), and turbulence and mixing height of the lower boundary layer (for dispersion).

"Understanding how and where the emission from any source is dispersed will be of great use to EMB as it will help determine the source's effects to air quality and the people," del Socorro said.

The EMB and the UP-IESM organized the closing ceremony on December 23, 2021 via Zoom Meeting Platform. Present during the ceremony were Engr. Vizminda A. Osorio, OIC-EMB

Assistant Director, Engr. Jundy T. Del Socorro, Chief of the EMB Air Quality Management Section, Dr. Mayzonee V. Ligaray, UP-IESM, UP-IESM. Dr. Cherry L. Ringor, Director of the UP-IESM, and Dr. Lemnuel V. Aragones, Former Director of the UP-IESM.##