

of RN-52 Generated Data in the Establishment of Radioactivity Data Base in the Philippines

One of the modalities of CTBTO verification systems is the operation of radionuclide monitoring station for air particulates. The Philippines through the Philippine Nuclear Research Institute has been operating and maintaining the RN-52 since 2005. This station is co-located at the Weather and Radar Station of the Philippine Atmospheric, Geophysical and Astronomical Services Administration in Tanay, Rizal, Philippines. It is a manual station, whose function is to provide continuous monitoring of radioactivity levels in the air. This involves collection of particulate materials on a filter; performance of gamma spectroscopy to identify radionuclides in the air filter and transmittal of raw spectral data using the Global Communications Infrastructure (GCI) to the International Data Centre (IDC). The designated operator manually change the filter and complete the daily routine. The radionuclide data from the ten-year RN-52 operation, thru the NDC-137 were retrieved, collated and analyzed. The poster presentation will discuss the analysis made on the radionuclide data as to the levels/ types of radioactivity, abundance, half lives, seasonal variation, and other relevant characteristics. These data will be inputted to the radionuclide baseline data being established in the Philippines. This baseline data will be useful for information, research and impact assessments in case of nuclear incidents.

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