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# of Atmospheric Transport Modelling to Assess Possible Influence of Emissions from a Radiopharmaceutical Facility on Detections at Selected IMS Radionuclide Stations

Radionuclide network of the International Monitoring System (IMS) monitors the presence of the Treaty-relevant radioisotopes in the atmosphere. These radioisotopes may have, however, a non-Treaty-relevant origin. Dispersed in the atmosphere they constitute a background which contributes to the detections at the IMS radionuclide stations. Consequently, the background needs to be understood and assessed to better assist the States Signatories in their Treaty verification function. An aspect of assessing the contribution of the background concentrations to the IMS radionuclide detections is presented in this poster. Recently, joint efforts of the national and CTBTO experts resulted in stack emission monitoring data from a radiopharmaceutical facility become available for scientific investigation. We will present studies performed with an atmospheric transport model which assess the influence of the emissions from a radiopharmaceutical facility on detections at the neighbouring IMS radionuclide stations. We will also make an attempt of reconstructing source information on the basis of the measurements and benchmark the results against stack monitoring data.

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