

Insulation System and Automatic Heating of Air Sampler "SNOW WHITE" for IMS Radionuclide Station (for Example Station RN61 (Dubna)).

Here is the the thermal insulation system and automatic heating of air sampler «SNOW WHITE» for IMS radionuclide station (for example station RN61 (Dubna)). During sustained operation of IMS radionuclide stations CTBTO on Russia we have the problem of air sampler «SNOW WHITE». When the temperatures low than -25 Degrees Celsius (winter period), we will have the next problems of sampler: - the data from Snow White will be stop, because the electronic bloc for transmit data is frozen (for example station RN61 this is LANTRONIX CoBox -FI-01; - sampling will be stop, because the bearings were destroyed and Vacuum Pump and electrical motor were jammed. This is difficult situation - sampling will be stop and need complicated repair of sampler at low outdoor temperatures. My system will provide stability of working «SNOW WHITE», if the temperatures from -25 Degrees Celsius to -50 Degrees Celsius. From December 2016 to February 2017 the system was successfully testing on the radionuclide station RN61. The reports were PR100013 and CCN124720 about it. The system has low costs, a good quality and it install and adjust don't stop «SNOW WHITE». I offer to install this system on all stations working low temperatures.

Primary author: RULEV, Igor (National Data Centre of Russian Federation)

Presenter: RULEV, Igor (National Data Centre of Russian Federation)

Track Classification: 4. Performance Optimization and Systems Engineering