



ID: P3.3-679

Type: E-poster

, controlling and preventing cross contamination in the OSI field laboratory- Risk Assessment Cross Contamination Tool (RACC)

The ENEA Laboratory has been working since many years on difficult-to-measure radionuclides and low level activity isotopes. To achieve low level measurement, dedicated equipment are required as well as specific protocols for the analytical plan. During an OSI, a field laboratory will be run to measure relevant OSI radionuclides, in samples collected in the inspected area. The field laboratory will not have the same performances of an off-site laboratory but nevertheless should achieve some requirements. One parameter to be evaluated is the Minimum Detectable Activity that is functional to the equipment and method for different radioisotopes. This parameter helps the inspectors to be confident about the performance of their method and subsequently to proceed to detect an anomaly associated with an OSI relevant event.

Another crucial aspect to pay attention to is to avoid cross contamination of the samples.. Several protection actions can be applied to avoid cross contamination: segregation, cleaning, material handling, staff training... Not all these actions are fully applicable during an OSI due to time and resources constraints. We have run some experimental studies to detect cross contamination, applying different scenarios. The results of this exercise and the Risk Assessment Cross Contamination Tool will be presented.

E-mail

antonietta.rizzo@enea.it

In-person or online preference

Primary authors: Ms RIZZO, Antonietta (Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA).); Dr TELLOLI, Chiara (Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA).); Mr BORGOGNONI, Fabio (Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA).); Mr UBALDINI, Alberto (Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA).); Dr OTTAVIANO, Giuseppe (Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA).); Ms FALSINI, Naomi (Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA).)

Presenter: Mr UBALDINI, Alberto (Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA).)

Session Classification: P3.3 On-Site Inspection Relevant Techniques

Track Classification: Theme 3. Monitoring and On-Site Inspection Technologies and Techniques: T3.3 On-Site Inspection Relevant Techniques