

Investigation and Characterization

Radiological measurement, characterization and analyses



THE NUCLEAR SOLUTIONS CHARACTERIZATION AND ANALYSES DEPARTMENT OFFERS COMPLETE SOLUTIONS FOR BEFORE, DURING AND AFTER YOUR MAINTENANCE OR PURIFICATION AND DISASSEMBLY OPERATIONS TO:

- › Conduct your radiological investigation operations
- › Precisely characterize the radiological status of a room, piece of equipment or plot of land
- › Characterize the waste, effluent or products originating from nuclear facilities or polluted sites
- › Test final radiological cleanliness



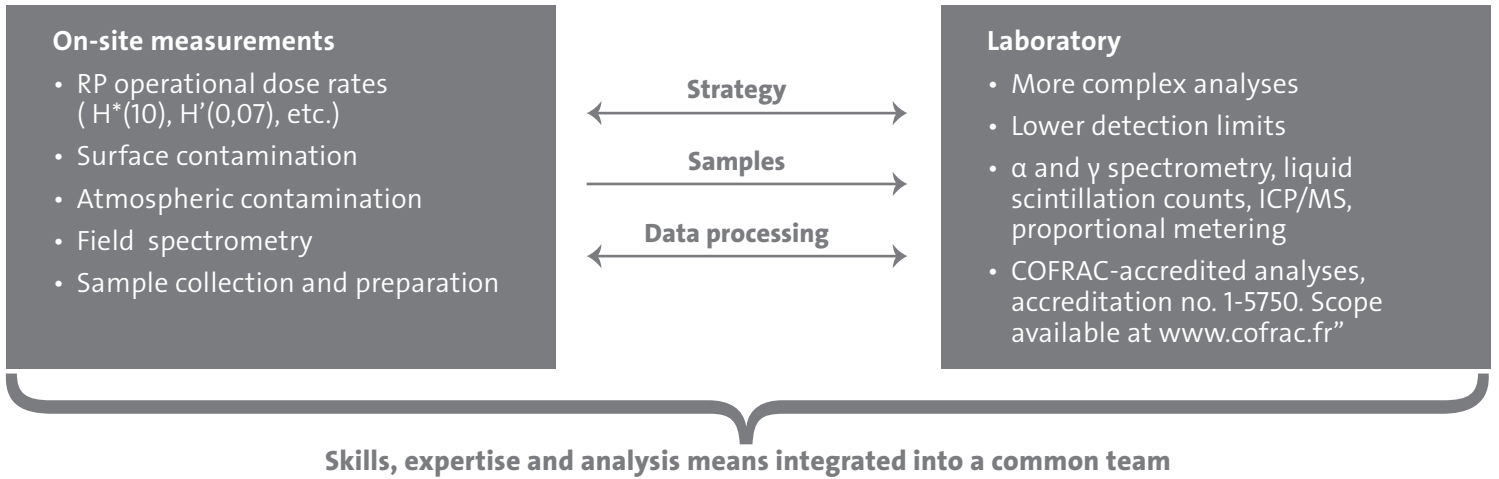
COFRAC accreditation
no. 1-5750. Scope available
at www.cofrac.fr

A complete range of services, from on-site response to laboratory analysis.

- › On-site status characterization
- › Facility investigations and mapping
- › Drilling and sample collection
- › Preparations and initial characterization in mobile laboratory
- › Induced waste identification, sorting and management
- › Volume optimization strategy

Nuclear Solutions is able to directly accept a broad range of samples:

- › Liquid matrices (water, effluent, waste, etc.)
- › Solid matrices (smears, filters, concrete, earth, waste, etc.)
- › Homogeneous or heterogeneous materials
- › Variable sample grain size and weight
- › Special object formats



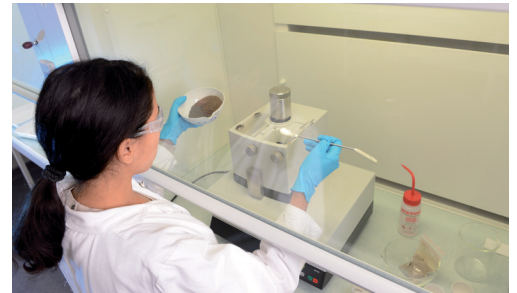
A complete range of laboratory analytical techniques:

- › α, β counts
- › α, γ spectrometry
- › Liquid scintillation counts
- › ICP MS – metal analyses

Standardized analytical methods.

COFRAC accreditation (no. 1-5750. Scope available at www.cofrac.fr)

Short turnaround times, compatible with works progress.



Analyses	Liquid matrices (water, effluents)	Solid matrices (soil, concrete)	Filters and smear tests
Gamma emitters (¹³⁷ Cs, ⁶⁰ Co,...)	YES	YES	YES
Global a index	YES	YES	YES
Global b index	YES	YES	YES
Pure beta emitters			
³ H	YES	YES	YES
¹⁴ C	YES	YES	YES
⁹⁰ Sr, ⁶³ Ni, ⁵⁵ Fe	YES	YES	YES
Alpha emitters			
²³⁴ , ²³⁵ , ²³⁸ U	YES	YES	YES
²²⁶ Ra	YES	YES	YES
²⁴¹ Am	YES	YES	YES
Np, Po, Pu,...	YES	YES	YES
Element analyses (heavy metals, etc.)	YES	YES	YES

Contact us for more information:

556, chemin de l'Isilon - 38670 CHASSE-SUR-RHÔNE, France

Tel.: (+33) 4 37 20 13 70 - laboratoire@asteralis.fr - www.nuclearsolutions.veolia.com

US Contact: 1355 Columbia Park Trail, Richland, WA 99352, USA - +1 (509) 737-1377