



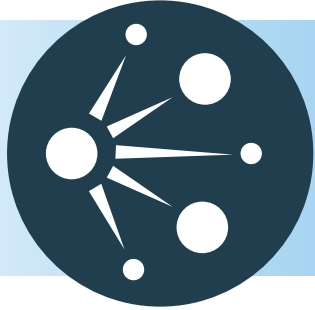
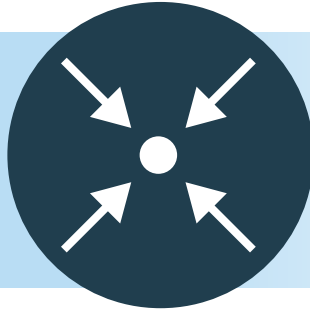
Radioactive Waste Characterization

Characterization is a determination of the physical, radiological, chemical and biological properties of radioactive waste.

Properties examined when characterizing nuclear waste:

Origin

Facility or activity that produced the waste



Criticality

Conditions under which the material can sustain a chain reaction

Chemical properties

Composition, solubility, combustibility of the material



Physical properties

Size, weight and state of the material

Biological properties

Biological hazard and organism absorption rate



Radiological properties

Half-lives of radionuclides, dose factors, surface contamination

The licensee's role

The licensee performs characterization activities at all stages of the radioactive waste cycle, including generation, handling, processing, transportation, storage and long-term management. It is the licensee's responsibility to conduct waste activities in accordance with regulatory requirements.

The CNSC's role

The CNSC carefully reviews the applicant's waste management process, including characterization, before providing a licence to any organization that participates in waste management activities.

CNSC inspectors perform regular inspections on all types of facilities and activities in Canada that generate or manage waste, and monitor the day-to-day work to ensure the safety of employees, the public, and the environment.

