

### **Tin-121m (Sn-121m) method statement**

Tin is separated from a digest or leachate solution using anion-exchange chromatography. The chemical recovery is monitored by measuring a tin isotope for which there are no natural elemental isobaric interferences before and after separation by ICP-MS. Sn-121m is measured using liquid scintillation counting. There are no reference solutions available for this radionuclide, so the counting efficiency is extrapolated from that of other radionuclides and the decay scheme of Sn-121m (Sn-121 is assumed to be in equilibrium with Sn-121m at its branching ratio). Other tin radionuclides are potential interferences if present; the most long lived of these, Sn-126, can be detected via gamma spectrometry of its progeny Sb-126.