

C. EXAMPLES OF COMMON RADIONUCLIDES

Table C.1 Examples of Common Radionuclides at Selected Types of Facilities

Facility Type	Common Radionuclides
Accelerator/Cyclotron	^{22}Na Activation products (e.g., ^{60}Co)
Aircraft Manufacturing and Maintenance Facility	^3H (dials and gauges) Magnesium-thorium alloys Nickel-thorium alloys ^{147}Pm (lighted dials and gauges) ^{226}Ra and progeny (radium dials) Depleted uranium
Cement Production Facility	Thorium series radionuclides Uranium series radionuclides
Ceramic Manufacturing Facility	Thorium series radionuclides Uranium series radionuclides
Fertilizer Plant	^{40}K Uranium series radionuclides
Fuel Fabrication Facility	^{99}Tc (reprocessing only) Enriched uranium Transuranics (e.g., ^{237}Np , ^{239}Pu) (reprocessing only)
Gaseous Diffusion Plant	^{99}Tc Enriched uranium Transuranics (e.g., ^{237}Np , ^{239}Pu)
Medical Imaging and Therapy Facility	^{60}Co ^{90}Sr $^{99\text{m}}\text{Tc}$ ^{131}I ^{137}Cs ^{192}Ir ^{201}Tl ^{226}Ra and progeny Depleted uranium collimators
Metal Foundry	^{40}K ^{60}Co ^{137}Cs Thorium series radionuclides Uranium series radionuclides
Munitions and Armament Manufacturing and Testing Facility	^3H (fire control devices) ^{226}Ra and progeny Depleted uranium

Table C.1 Examples of Common Radionuclides at Selected Types of Facilities (continued)

Facility Type	Common Radionuclides
Nuclear Medicine Laboratory or Pharmaceutical Laboratory	^{99m}Tc ^{131}I ^{137}Cs ^{192}Ir ^{201}Tl ^{226}Ra and progeny
Nuclear Power Reactor	Activation products (e.g., ^{55}Fe , ^{60}Co , ^{63}Ni) Fission products (e.g., ^{90}Sr , ^{137}Cs) Transuranics (e.g., ^{237}Np , ^{239}Pu)
Oil and Gas	^{226}Ra and progeny
Optical Glass Facility	Thorium series radionuclides Uranium series radionuclides
Paint and Pigment Manufacturing Facility	Thorium series radionuclides Uranium series radionuclides
Paper and Pulp Facility	Thorium series radionuclides Uranium series radionuclides
Radium Dial Painting	^{226}Ra and progeny
Rare Earth Facility	^{40}K Thorium series radionuclides Uranium series radionuclides
R&D Facility with Broad Scope License	^3H ^{14}C
Research Laboratory	^3H ^{14}C ^{22}Na ^{24}Na ^{32}P ^{57}Co ^{63}Ni ^{123}I ^{125}I
Scrap Metal Recycling Facility	^{60}Co ^{90}Sr ^{137}Cs ^{226}Ra and progeny Thorium series radionuclides Uranium series radionuclides

Table C.1 Examples of Common Radionuclides at Selected Types of Facilities (continued)

Facility Type	Common Radionuclides
Sealed Source Facility	⁶⁰ Co ⁹⁰ Sr ¹³⁷ Cs ²⁴¹ Am
Transuranic Facility	²⁴¹ Am ^{238, 239, 240, 241} Pu
Uranium Mill	²³⁸ U ²³⁰ Th ²²⁶ Ra and progeny Thorium series radionuclides Uranium series radionuclides
Waste Water Treatment Facility	Thorium series radionuclides Uranium series radionuclides
Widely Distributed General Commerce	³ H (exit signs) ⁴⁰ K (naturally-occurring) ⁵⁷ Co (lead paint analyzer) ⁶⁰ Co (radiography source) ⁶³ Ni (chemical agent detectors) ¹⁰⁹ Cd (lead paint analyzer) ¹³⁷ Cs (soil moisture density gauge, liquid level gauge) ¹⁹² Ir (radiography source) ²²⁶ Ra (watch dials) ²⁴¹ Am (AmBe soil moisture density gauge, smoke detectors) Orphan sources