CMC Service Categories

Services categories for new and updated CMCs

1. SECTION 1: X- AND GAMMA RAYS, CHARGED PARTICLES

Quantity	Medium	Source
6 Kerma/rate	0 Not applicable	1 Other
7 Reference kerma rate	1 Other material	2 Electrons
8 Ambient dose equivalent/rate	2 Air	3 Beta radiation
9 Directional dose equivalent/rate	3 Water	4 X-ray, 10 kV to 50 kV
12 Kerma length product	4 Graphite	6 Photons, high energy
13 Kerma area product	5 Tissue: superficial	7 Co-60
14 X-ray tube voltage	6 Tissue: penetrating	8 Cs-137
15 Absorbed dose/rate		9 Ir-192
16 Personal dose equivalent/rate		10 Am-241
		11 Co-57
		12 I-125
		13 Pd-103
		14 Ra-226
		15 X-ray, 50 kV to 300 kV
		16 X-ray, 300 kV to 600 kV
		17 Protons
		18 Heavy Ions

2. SECTION 2: MEASUREMENTS OF RADIOACTIVITY

Quantity	Medium	Source	Radionuclide
1 Activity	0 Not applicable	1 Single radionuclide source	
5 Surface emission rate	1 Other	2 Multi-radionuclide source	Xx-00
8 Emission rate	2 Gas	3 K x-rays	
12 Efficiency	3 Liquid		
	4 Solid		
	5 Aerosol		
	6 Reference material: other		
	8 Reference material: water		
	10 Reference material: soils / sediment		
	11 Reference material: flora		
	12 Reference material: building materials		
	13 Reference material: fauna		

3. SECTION 3: NEUTRON MEASUREMENTS

Quantity	Medium	Source
1 Emission rate	0 Not applicable	2 Mono-energetic neutrons
4 Fluence/rate	1 Air	3 Thermal neutron distribution
17 Absorbed dose/rate	2 Water	4 Wide energy range neutrons
	3 Tissue	11 Radionuclide sources
		12 High energy (>20 MeV) quasi-mono-energetic neutrons

Note:

1. *Institutes requesting new or updating existing CMCs in dose equivalent rate should convert them to the fluence/rate quantity using the corresponding conversion factor.*

2. *All the radionuclide sources for Neutron Measurements are now included in source 11 (Radionuclide sources), with the exception of D2O moderated 252Cf sources which should be included in 4 (Wide energy range neutrons). The information of radionuclide should be given in the field "Source".*