Radiological Materials List

Primary Isotope Category		Special Nuclear Material				Industrial Isotopes													Medical Isotopes									Naturally Occurring Radioactive Material			
		ALWAYS INVESTIGATE																													
Isotope *These isotopes may not be identifiable by the RIID	Neutron Emitter	Neptunium (Np) 237	Plutonium (Pu) 239	Uranium (U) 233	Uranium (U) 235	Americium (Am) 241	Barium (Ba) 133	Bismuth (Bi) 207	Californium (Cf) 252*	Cesium (Cs) 134	Cesium (Cs) 137	Cobalt (Co) 57	Cobalt (Co) 60	Europium (Eu) 152	Iridium (Ir) 192	Manganese (Mn) 54	Selenium (Se) 75	Sodium (Na) 22	Strontium (Sr) 90*	Fluorine (F) 18	Gallium (Ga) 67	Iodine (I) 123	Iodine (I) 131	Indium (In) 111	Palladium (Pd) 103	Technetium (Tc) 99m	Thallium (Tl) 201	Xenon (Xe) 133	Potassium (K) 40	Radium (Ra) 226	Thorium (Th) 232	Uranium (U) 238
Weapons Usable Material	X	X	X	X	X																										
Special Nuclear Material																															
UF_6	X				X																										X
Nuclear Fuel Assemblies	X		X		X																										X
Uranium Ore Concentrates	X				X																										X
Potential Radiological Weapons	X		X			X			X		X		X		X				X											X		
Medical																															
Radiological Medical Treatments																				X	X	X	X	X	X	X	X	X				
Medical Source Shipments	X								X		X	X	X		X				X	X	X	X	X	X	X	X	X	X		X		
Ceramics and Glass																															
Cloisonné Jewelry					X																										X
Dental Ceramics					X																							X		X	X
Glass and Glazes					X																								X	X	X
Porcelain					X																									X	X
Common Building Materials																															
Cement																												X		X	
Clay (Adobe) Brick																												X		X	
Concrete																												X	X	X	
Firebrick																														X	
Granite																												X	X	X	
Marble																												X	X	X	
Sandstone																												X	X	X	
Tile																													X	X	
Wallboard/Gypsum																												X		X	
Wood																												X			
Equipment																															
Aircraft Counterweights																															X
Aircraft Engine Components																														X	
Calibration Sources	X					X	X	X	X		X	X	X	X		X		X													
Electronic Equipment							X																							X	
Gamma Ray Imaging Systems (VACIS)											X		X																		
Glow Lamps											X		X																		
Gyro Compass																															X
Industrial Gauges	X					X			X	X	X						X		X										X		
Neutron Detection Instruments		X			X																										
Optical/Camera Lenses																														X	
Polishing Powder																														X	
Radiography Sources						X					X		X		X		X														
Radioluminescent Products																													X		
Radioisotope Thermoelectric Generators (RTGs)																			X												
Surge Protectors											X																				
Thoriated Welding Rods																														X	
Tundish Nozzles (Steelmaking)																														X	
Voltage Regulators											X																				
Well Logging Equipment	X					X			X		X		X		X																
Foods																															
Brazil Nuts																												X	X		
Bulk Tobacco																												X	X		
Coffee																												X	X		
Fish																												X			
Household Items																															
Gas Lantern Mantle																														X	
Fertilizers																												X	X	X	
Fiestaware					X																										X
Fluorescent Lamp Starters													X																X		
Cat Sand/Cat Litter																													X	X	
Lite Salt																												X			
Propane																													X		
Sheep's Wool																												X	X		
Smoke Detector†			X			X																							X		
Televisions																												X			
Tires																													X		
Industry																															
Natural Gas Tankers																													X		
Chemical Processing Scrap Material																													X		
Oilfield Scrap Material																													X		
Rocks and Minerals																															
Alum Shale (Sweden)																												X	X	X	
Anhydride (Gypsum Byproduct)																													X	X	
Basalt																												X	X	X	
Coal Ash																												X	X	X	
Diorite																												X	X	X	
Feldspar																												X	X	X	
Gabbro																												X	X	X	
Granodiorite																												X	X	X	
Monazite Sand																												X	X	X	
Peridotite																												X	X	X	
Phosphates																												X	X	X	
Phosphogypsum																												X	X	X	
Shale																												X	X	X	
Slate																												X	X	X	
Zirconium Concentrate																													X	X	

†Smoke detectors in former Soviet Union often contain plutonium-239

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