

Figure: 30 TAC §336.210(e)

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Radioactive Material*	Release Fraction	Quantity (curies)	Radioactive Material*	Release Fraction	Quantity (curies)	Radioactive Material*	Release Fraction	Quantity (curies)
Ac-228 (89)	0.001	4,000	In-114m (49)	0.01	1,000	V-48 (23)	0.01	7,000
Am-241 (95)	0.001	2	Ir-192 (77)	0.001	40,000	Xe-133 (54)	1.0	900,000
Am-242 (95)	0.001	2	Fe-55 (26)	0.01	40,000	Y-91 (39)	0.01	2,000
Am-243 (95)	0.001	2	Fe-59 (26)	0.01	7,000	Zn-65 (30)	0.01	5,000
Sb-124 (51)	0.01	4,000	Kr-85 (36)	1.0	6,000,000	Zr-93 (40)	0.01	400
Sb-126 (51)	0.01	6,000	Pb-210 (82)	0.01	8	Zr-95 (40)	0.01	5,000
Ba-133 (56)	0.01	10,000	Mn-56 (25)	0.01	60,000	Any other beta-gamma emitter	0.01	10,000
Ba-140 (56)	0.01	30,000	Hg-203 (80)	0.01	10,000			
Bi-207 (83)	0.01	5,000	Mo-99 (42)	0.01	30,000	Mixed fission products	0.01	1,000
Bi-210 (83)	0.01	600	Np-237 (93)	0.001	>2			
Cd-109 (48)	0.01	1,000	Ni-63 (28)	0.01	20,000	Mixed corrosion products	0.01	10,000
Cd-113 (48)	0.01	80	Nb-94 (41)	0.01	300			
Ca-45 (20)	0.01	20,000	P-32 (15)	0.5	100			
Cf-252 (98)	0.001	9(20mg)	P-33 (15)	0.5	1,000	Contaminated equipment, beta-gamma	0.001	10,000
C-14 (6)**	0.01	50,000	Po-210 (84)	0.01	10			
Ce-141 (58)	0.01	10,000	K-42 (19)	0.01	9,000			
Ce-144 (58)	0.01	300	Pm-145 (61)	0.01	4,000	Irradiated material, any form other than solid non-combustible	0.01	1,000
Cs-134(55)	0.01	2,000	Pm-147 (61)	0.01	4,000			
Cs-137 (55)	0.01	2,000	Ra-226 (88)	0.001	100			
Cl-36 (17)	0.5	100	Ru-106 (44)	0.01	200			
Cr-51 (24)	0.01	300,000	Sm-151 (62)	0.01	4,000			
Co-60 (27)	0.001	5,000	Sc-46 (21)	0.01	3,000			
Cu-64 (29)	0.01	200,000	Se-75 (34)	0.01	10,000	Irradiated material, solid non-combustible	0.001	10,000
Cm-242 (96)	0.001	60	Ag110m (47)	0.01	1,000			
Cm-243 (96)	0.001	3	Na-22 (11)	0.01	9,000			
Cm-244 (96)	0.001	4	Na-24 (11)	0.01	10,000			
Cm-245 (96)	0.001	2	Sr-89 (38)	0.01	3,000	Mixed radioactive waste, beta-gamma	0.01	1,000
Eu-152 (63)	0.01	500	Sr-90 (38)	0.01	90			
Eu-154 (63)	0.01	400	Sr-35 (16)	0.5	900			
Eu-155 (63)	0.01	3,000	Tc-99 (43)	0.01	10,000	Packaged mixed waste, beta-gamma***	0.001	10,000
Ge-68 (32)	0.01	2,000	Tc-99m (43)	0.01	400,000			
Gd-153 (64)	0.01	5,000	Te-127m(52)	0.01	5,000			
Au-198 (79)	0.01	30,000	Te-129m(52)	0.01	5,000	Any other alpha emitter	0.001	2
Hf-172 (72)	0.01	400	Tb-160 (65)	0.01	4,000			
Hf-181 (72)	0.01	7,000	Tm-170 (69)	0.01	4,000	Contaminated equipment, alpha	0.0001	20
Ho-166 (67)	0.01	100	Sn-113 (50)	0.01	10,000			
H-3 (1)	0.5	20,000	Sn-123 (50)	0.01	3,000	Packaged waste, alpha***	0.0001	20
I-125 (53)	0.5	10	Sn-126 (50)	0.01	1,000			
I-131 (53)	0.5	10	Ti-144 (22)	0.01	100			

*For combinations of radioactive materials, consideration of the need for an emergency plan is required if the sum of the ratios of the quantity of each radioactive material authorized to the quantity listed for that material in this paragraph exceeds one.

**Non-carbon dioxide forms only.

***Waste packaged in Type B containers does not require an emergency plan.