

Anlage 4 Tabelle 1: Freigrenzen, Freigabewerte für verschiedene Freigabearten, Werte der Oberflächenkontamination

Radionuklid	Freigrenze in Bq	Freigrenze, uneingeschränkte Freigabe von festen u. flüssigen Stoffen in Bq/g	Aktivität HRQ in TBq	Oberflächenkontamination in Bq/cm ²	spezifische Freigabe von									Halbwertszeit
					Bauschutt von mehr als 1.000 Mg/a in Bq/g	Bodenflächen in Bq/g	festen Stoffen bis zu 100 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 100 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	festen Stoffen bis zu 1000 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 1000 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	Gebäuden zur Wieder- und Weiterverwendung in Bq/cm ²	Gebäuden zum Abriss in Bq/cm ²	Metallschrott zur Rezyklierung in Bq/g	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
H-3	1 E+9	1 E+2	2 E+3	1 E+2	6 E+1	3	6 E+4	1 E+6	6 E+3	1 E+6	1 E+3	4 E+3	1 E+3	12,3 a
Be-7	1 E+7	1 E+1	1	1 E+2	3 E+1	2	3 E+2	4 E+2	9 E+1	4 E+1	8 E+1	6 E+2	3 E+2	53,2 d
Be-10	1 E+6	1 E+2	3 E+1											1,6E+6 a
C-11	1 E+6	1 E+1	6 E-2											20,4 m
C-11 Monoxid, Dioxid	1 E+9	1 E+1												20,4 m
C-14	1 E+7	1	5 E+1	1 E+2	1 E+1	4 E-2	4 E+3	1 E+4	4 E+2	1 E+4	1 E+3	6 E+3	8 E+1	5,7E+3 a
C-14 Monoxid, Dioxid	1 E+11	1												5,7E+3 a
N-13	1 E+9	1 E+2	6 E-2											< 10 m
O-15	1 E+9	1 E+2												2,0 m
F-18	1 E+6	1 E+1	6 E-2	1							1	2 E+4	1 E+1	109,7 m
Na-22	1 E+6	1 E-1	3 E-2	1	1 E-1	4 E-3	7	9	2	2	4 E-1	4	1 E-1	2,6 a
Na-24	1 E+5	1	2 E-2	1							1	7 E+2	1 E+1	15,0 h
Mg-28+	1 E+5	1	2 E-2											20,9 h
Al-26	1 E+5	1 E-2	3 E-2											7,2E+5 a
Si-31	1 E+6	1 E+3	1 E+1	1 E+2							1 E+2	2 E+7	1 E+3	2,6 h
Si-32+	1 E+6	1 E+2	7				1 E+3	1 E+3	4 E+2	9 E+2			5 E+2	132,0 a
P-32	1 E+5	1 E+3	1 E+1	1 E+2	2 E+1	2 E-2	1 E+3	1 E+3	1 E+3	1 E+3	1 E+2	4 E+5	2 E+1	14,3 d
P-33	1 E+8	1 E+3	2 E+2	1 E+2	2 E+2	8 E-2	1 E+5	1 E+5	2 E+4	1 E+5	1 E+3	6 E+5	2 E+2	25,4 d
S-35	1 E+8	1 E+2	6 E+1	1 E+2	5 E+2	1 E-2	5 E+3	2 E+4	5 E+2	2 E+3	1 E+3	2 E+5	6 E+2	87,3 d
S-35 Gas	1 E+9	1 E+2												87,3 d
Cl-36	1 E+6	1	2 E+1	1 E+2	3 E-1		3	3	3 E-1	3 E-1	3 E+1	3 E+1	1 E+1	3,0E+5 a
Cl-38	1 E+5	1 E+1	5 E-2	1	2 E-1						1	4 E+4	1 E+1	37,2 m
Cl-39	1 E+5	1 E+1												55,6 m
Ar-37	1 E+8	1 E+6	UL											35,0 d
Ar-39	1 E+4	1 E+7	3 E+2											269,0 a
Ar-41	1 E+9	1 E+2	5 E-2											1,8 h
K-40	1 E+6	1	UL	1 E+1	8 E-1						6	2 E+1		1,3E+9 a
K-42	1 E+6	1 E+2	2 E-1	1 E+1	8 E-1						1 E+1	1 E+4	1 E+2	12,4 h
K-43	1 E+6	1 E+1	7 E-2	1	2 E-1						1	2 E+3	1 E+1	22,2 h
K-44	1 E+5	1 E+1												22,1 m
K-45	1 E+5	1 E+1												17,3 m
Ca-41	1 E+7	1 E+2	UL				2 E+2	1 E+3	2 E+1	1 E+2				1,0E+5 a
Ca-45+	1 E+7	1 E+2	1 E+2	1 E+2	4 E+2	4 E-2	5 E+3	1 E+4	5 E+2	4 E+3	1 E+3	6 E+4	6 E+2	163,0 d
Ca-47	1 E+6	1 E+1	6 E-2	1	2 E-1						1	4 E+2	1 E+1	4,5 d
Sc-43	1 E+6	1 E+1												3,9 h
Sc-44	1 E+5	1 E+2	3 E-2											4,0 h
Sc-44m+	1 E+7	1												2,4 d
Sc-46	1 E+6	1 E-1	3 E-2	1	1 E-1	4 E-2	8	9	2	2	1	1 E+1	3 E-1	83,8 d
Sc-47	1 E+6	1 E+2	7 E-1	1 E+1	3						1 E+1	6 E+3	1 E+2	3,4 d
Sc-48	1 E+5	1	2 E-2	1	7 E-2						1	3 E+2	1 E+1	43,7 h
Sc-49	1 E+5	1 E+3												57,2 m
Ti-44+	1 E+5	1 E-1	3 E-2											60,0 a
Ti-45	1 E+6	1 E+1												3,1 h
V-47	1 E+5	1 E+1												32,6 m
V-48	1 E+5	1	2 E-2	1	8 E-2	3 E-2	6	7	2	2	1	4 E+1	1	16,0 d
V-49	1 E+7	1 E+4	2 E+3											330,0 d
Cr-48	1 E+6	1 E+2												21,6 h
Cr-49	1 E+6	1 E+1												41,9 m
Cr-51	1 E+7	1 E+2	2	1 E+2	8	3	5 E+2	9 E+2	1 E+2	1 E+2	1 E+2	2 E+3	1 E+3	27,7 d
Mn-51	1 E+5	1 E+1		1	2 E-1						1	5 E+4	1 E+1	46,2 m
Mn-52	1 E+5	1	2 E-2	1	6 E-2						1	9 E+1	1 E+1	5,6 d
Mn-52m	1 E+5	1 E+1	UL	1	9 E-2						1	5 E+4	1 E+1	21,2 m
Mn-53	1 E+9	1 E+2		1 E+2	6 E+1	3	6 E+2	4 E+3	6 E+1	4 E+2	1 E+3	2 E+4	1 E+4	3,7E+6 a
Mn-54	1 E+6	1 E-1	8 E-2	1	3 E-1	9 E-2	1 E+1	1 E+1	6	6	1	1 E+1	2	312,1 d
Mn-56	1 E+5	1 E+1	4 E-2	1	1 E-1						1	9 E+3	1 E+1	2,6 h
Fe-52+	1 E+6	1 E+1	2 E-2	1 E+2	7 E-2						1	2 E+3	1 E+1	8,3 h
Fe-55	1 E+6	1 E+3	8 E+2	1 E+2	2 E+2	6	1 E+4	1 E+4	7 E+3	1 E+4	1 E+3	2 E+4	1 E+4	2,7 a
Fe-59	1 E+6	1	6 E-2	1	2 E-1	6 E-2	1 E+1	1 E+1	4	4	1	3 E+1	1 E+1	44,5 d
Fe-60+	1 E+5	1 E+1	6 E-2											1,5E+6 a
Co-55	1 E+6	1 E+1	3 E-2	1	1 E-1						1	1 E+3	1 E+1	17,5 h

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Co-56	1 E+5	1 E-1	2 E-2	1	6 E-2	2 E-2	4	5	1	1	1	6	4 E-1	77,3 d
Co-57	1 E+6	1	7 E-1	1 E+1	3	8 E-1	1 E+2	1 E+2	5 E+1	5 E+1	1 E+1	1 E+2	2 E+1	271,8 d
Co-58	1 E+6	1	7 E-2	1	2 E-1	8 E-2	1 E+1	1 E+1	5	5	1	3 E+1	1	70,9 d
Co-58m	1 E+7	1 E+4	7 E-2	1 E+2	1 E+4						1 E+3	1 E+9	1 E+4	8,9 h
Co-60	1 E+5	1 E-1	3 E-2	1	9 E-2	3 E-2	6	7	2	2	4 E-1	3	6 E-1	5,3 a
Co-60m	1 E+6	1 E+3		1 E+2	6 E+1						1 E+3	7 E+7	1 E+3	10,5 m
Co-61	1 E+6	1 E+2		1 E+1	4						1 E+1	5 E+5	1 E+2	1,7 h
Co-62m+	1 E+5	1 E+1		1	8 E-2						1	7 E+4	1 E+1	13,9 m
Ni-56	1 E+6	1 E+1												6,1 d
Ni-57	1 E+6	1 E+1												35,9 h
Ni-59	1 E+8	1 E+2	1 E+3	1 E+2	3 E+2	8	3 E+3	1 E+4	3 E+2	3 E+3	1 E+3	9 E+4	1 E+4	7,6E+4 a
Ni-63	1 E+8	1 E+2	6 E+1	1 E+2	3 E+2	3	1 E+4	6 E+4	1 E+3	6 E+3	1 E+3	4 E+4	1 E+4	100,6 a
Ni-65	1 E+6	1 E+1	1 E-1	1 E+1	4 E-1						1 E+1	3 E+4	1 E+1	2,5 h
Ni-66+	1 E+7	1 E+4												54,4 h
Cu-60	1 E+5	1 E+1												23,7 m
Cu-61	1 E+6	1 E+1												3,3 h
Cu-64	1 E+6	1 E+2	3 E-1	1 E+1	1						1 E+1	2 E+4	1 E+2	12,7 h
Cu-67	1 E+6	1 E+2	7 E-1											61,9 h
Zn-62+	1 E+6	1 E+2												9,3 h
Zn-63	1 E+5	1 E+1												38,4 m
Zn-65	1 E+6	1 E-1	1 E-1	1	4 E-1	1 E-2	1 E+1	1 E+1	8	3	2	2 E+1	5 E-1	244,2 d
Zn-69	1 E+6	1 E+3	3 E+1	1 E+2	1 E+4						1 E+2	7 E+9	1 E+4	56,4 m
Zn-69m+	1 E+6	1 E+1	2 E-1	1 E+1	6 E-1						1 E+1	7 E+3	1 E+2	13,8 h
Zn-71m	1 E+6	1 E+1												4,0 h
Zn-72+	1 E+6	1 E+2												46,5 h
Ga-65	1 E+5	1 E+1												15,2 m
Ga-66	1 E+5	1 E+1												9,5 h
Ga-67	1 E+6	1 E+2	5 E-1											3,3 d
Ga-68	1 E+5	1 E+1	7 E-2											67,7 m
Ga-70	1 E+6	1 E+3												21,1 m
Ga-72	1 E+5	1 E+1	3 E-2	1	8 E-2						1	1 E+3	1 E+1	14,1 h
Ga-73+	1 E+6	1 E+2												4,9 h
Ge-66	1 E+6	1 E+1												2,3 h
Ge-67	1 E+5	1 E+1												18,9 m
Ge-68+	1 E+5	1 E-1	7 E-2	1	2 E-1		1 E+1	1 E+1	5	2	1	1 E+1		271,0 d
Ge-69	1 E+6	1 E+1												39,1 h
Ge-71	1 E+8	1 E+4	1 E+3	1 E+2	4 E+3	5 E+1	1 E+4	1 E+4	1 E+4	1 E+4	1 E+3	9 E+7	4 E+3	11,4 d
Ge-75	1 E+6	1 E+3												82,8 m
Ge-77	1 E+5	1 E+1	6 E-2											11,3 h
Ge-78	1 E+6	1 E+2												88,0 m
As-69	1 E+5	1 E+1												15,2 m
As-70	1 E+5	1 E+1												52,6 m
As-71	1 E+6	1 E+1												65,3 h
As-72	1 E+5	1 E+1	4 E-2											26,0 h
As-73+	1 E+7	1 E+3	4 E+1	1 E+2	1 E+2	4 E+1	1 E+3	1 E+3	1 E+3	1 E+3	4 E+2	2 E+4	1 E+2	80,3 d
As-74	1 E+6	1 E+1	9 E-2	1	3 E-1	1 E-1	1 E+1	1 E+1	7	3	1	1 E+2	1 E+1	17,8 d
As-76	1 E+5	1 E+1	2 E-1	1 E+1	5 E-1						1 E+1	4 E+3	1 E+2	26,2 h
As-77	1 E+6	1 E+3	8	1 E+2	3 E+1						1 E+2	1 E+5	1 E+3	38,8 h
As-78	1 E+5	1 E+1												1,5 h
Se-70	1 E+6	1 E+1												41,1 m
Se-73	1 E+6	1 E+1												7,2 h
Se-73m	1 E+6	1 E+2												39,8 m
Se-75	1 E+6	1	2 E-1	1 E+1	7 E-1	4 E-3	4 E+1	7 E+1	1 E+1	7	5	5 E+1	3	119,6 d
Se-79	1 E+7	1 E-1	2 E+2											3,8E+5 a
Se-81	1 E+6	1 E+3												18,4 m
Se-81m+	1 E+7	1 E+3												57,3 m
Se-83	1 E+5	1 E+1												22,3 m
Br-74	1 E+5	1 E+1												25,4 m
Br-74m	1 E+5	1 E+1												46,0 m
Br-75	1 E+6	1 E+1												1,6 h
Br-76	1 E+5	1 E+1	3 E-2											16,2 h
Br-77	1 E+6	1 E+2	2 E-1											57,0 h
Br-80	1 E+5	1 E+2												17,6 m
Br-80m+	1 E+7	1 E+3												4,4 h
Br-82	1 E+6	1	3 E-2	1	1 E+1						1	4 E+2	1 E+1	35,3 h
Br-83+	1 E+6	1 E+3												2,4 h
Br-84	1 E+5	1 E+1												31,8 m
Kr-74	1 E+9	1 E+2												11,5 m

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Kr-76	1 E+9	1 E+2												14,6 h
Kr-77	1 E+9	1 E+2												1,2 h
Kr-79	1 E+5	1 E+3												34,9 h
Kr-81	1 E+7	1 E+4	3 E+1											2,1E+5 a
Kr-81m	1 E+10	1 E+3												13,3 s
Kr-83m	1 E+12	1 E+5												1,8 h
Kr-85	1 E+4	1 E+5	3 E+1											10,8 a
Kr-85m	1 E+10	1 E+3	5 E-1											4,5 h
Kr-87	1 E+9	1 E+2	9 E-2											76,3 m
Kr-88+	1 E+9	1 E+2												2,8 h
Rb-79	1 E+5	1 E+1												22,9 m
Rb-81+	1 E+6	1 E+1	1 E-1											4,6 h
Rb-81m+	1 E+7	1 E+3												30,3 m
Rb-82m	1 E+6	1 E+1												6,5 h
Rb-83+	1 E+6	1	1 E-1	1 E+1	4 E-1		3 E+1	4 E+1	9	9	5	4 E+1	7 E-1	86,2 d
Rb-84	1 E+6	1	7 E-2											33,5 d
Rb-86	1 E+5	1 E+2	7 E-1	1 E+1	2	5 E-2	1 E+2	1 E+2	6 E+1	6 E+1	1 E+1	1 E+3	2 E+1	18,6 d
Rb-87	1 E+7	1 E+1	UL											4,8E+10 a
Rb-88	1 E+5	1 E+1												17,8 m
Rb-89	1 E+5	1 E+1												15,4 m
Sr-80+	1 E+7	1 E+3												1,8 h
Sr-81	1 E+5	1 E+1												22,3 m
Sr-82+	1 E+5	1	6 E-2											25,4 d
Sr-83	1 E+6	1 E+1												32,4 h
Sr-85	1 E+6	1	1 E-1	1	4 E-1	1 E-1	3 E+1	4 E+1	9	9	6	5 E+1	1	64,8 d
Sr-85m	1 E+7	1 E+2	1 E-1	1 E+1	1						1 E+1	2 E+5	1 E+2	67,6 m
Sr-87m	1 E+6	1 E+2	2 E-1	1 E+1	7 E-1						1 E+1	5 E+4	1 E+2	2,8 h
Sr-89+	1 E+6	1 E+3	2 E+1	1 E+2	2 E+1	3 E-2	1 E+3	1 E+3	1 E+3	1 E+3	1 E+1	7 E+4	2 E+1	50,6 d
Sr-90+	1 E+4	1	1	1	6 E-1	2 E-3	6	4 E+1	6 E-1	4	3 E+1	3 E+1	9	28,8 a
Sr-91+	1 E+5	1 E+1	6 E-2	1	3 E-1						1 E+1	6 E+3	1 E+1	9,6 h
Sr-92	1 E+6	1 E+1	4 E-2	1	2 E-1						1	1 E+4	1 E+1	2,7 h
Y-86	1 E+5	1 E+1												14,7 h
Y-86m	1 E+7	1 E+2												48,0 m
Y-87+	1 E+6	1 E+1	9 E-2											79,8 h
Y-88	1 E+6	1 E-1	3 E-2	1	8 E-2		6	7	2	2	9 E-1	7	2 E-1	106,6 d
Y-90	1 E+5	1 E+3	5	1 E+2	6 E+2						1 E+2	2 E+6	1 E+3	64,1 h
Y-91	1 E+6	1 E+2	8	1 E+2	2 E+1	5	1 E+3	1 E+3	1 E+3	1 E+3	1 E+2	5 E+4	3 E+1	58,5 d
Y-91m	1 E+6	1 E+2	1 E-1	1	4 E-1						1 E+1	9 E+4	1 E+2	49,7 m
Y-92	1 E+5	1 E+2	2 E-1	1 E+1	9 E-1						1 E+1	5 E+4	1 E+2	3,5 h
Y-93	1 E+5	1 E+2	6 E-1	1 E+1	3						1 E+1	4 E+4	1 E+2	10,2 h
Y-94	1 E+5	1 E+1												18,7 m
Y-95	1 E+5	1 E+1												10,3 m
Zr-86+	1 E+7	1 E+2												16,5 h
Zr-88	1 E+6	1	2 E-2											83,0 d
Zr-89+	1 E+6	1 E+1												78,4 h
Zr-93	1 E+7	1 E+1		1 E+2	1 E+1	2 E+1	8 E+2	8 E+3	8 E+1	8 E+2	1 E+2	3 E+3	1 E+1	1,5E+6 a
Zr-95+	1 E+6	1	4 E-2	1	9 E-2	1 E-1	1 E+1	1 E+1	4	4	1	2 E+1	6 E-1	64,0 d
Zr-97		1 E+1			1 E-1						1	1 E+3		16,8 h
Zr-97+	1 E+5	1 E+1	4 E-2	1									1 E+1	16,8 h
Nb-88	1 E+5	1 E+1												14,5 m
Nb-89+	1 E+5	1 E+1												2,0 h
Nb-90+	1 E+5	1 E+1												14,6 h
Nb-93m	1 E+7	1 E+1	3 E+2	1 E+2	4 E+2	4	1 E+4	1 E+4	4 E+3	1 E+4	5 E+2	4 E+4	4 E+2	16,1 a
Nb-94	1 E+6	1 E-1	4 E-2	1	1 E-1	5 E-2	1 E+1	1 E+1	3	3	5 E-1	4	4 E-1	2,0E+4 a
Nb-95	1 E+6	1	9 E-2	1	3 E-1	1 E-1	1 E+1	1 E+1	6	6	1	6 E+1	1 E+1	35,0 d
Nb-97	1 E+6	1 E+1	1 E-1	1	3 E-1						1 E+1	5 E+4	1 E+1	72,1 m
Nb-98m	1 E+5	1 E+1		1	9 E-2						1	2 E+4	1 E+1	51,3 m
Mo-90+	1 E+6	1 E+1		1	3 E-1						1	9 E+3	1 E+1	5,6 h
Mo-93	1 E+8	1 E+1	3 E+2	1 E+2	4	2 E-1	4 E+1	3 E+2	4	3 E+1	8 E+1	2 E+3	2 E+2	4,0E+3 a
Mo-99+	1 E+6	1 E+1	3 E-1	1 E+1	2						1 E+1	4 E+3	1 E+2	65,9 h
Mo-101+	1 E+6	1 E+1		1	2 E-2						1	2 E+4	1 E+1	14,6 m
Tc-93	1 E+6	1 E+1												2,8 h
Tc-93m	1 E+6	1 E+1												43,5 m
Tc-94	1 E+6	1 E+1												4,9 h
Tc-94m	1 E+5	1 E+1												52,0 m
Tc-95m+	1 E+6	1	1 E-1											61,0 d
Tc-96	1 E+6	1	3 E-2	1	9 E-2						1	2 E+2	1 E+1	4,3 d
Tc-96m	1 E+7	1 E+3	3 E-2	1 E+2	5						1 E+2	1 E+6	1 E+3	51,5 m

Radionuklid	Freigrenze in Bq	Freigrenze, uneingeschränkte Freigabe von festen u. flüssigen Stoffen in Bq/g	Aktivität HRQ in TBq	Oberflächenkontamination in Bq/cm ²	spezifische Freigabe von									Halbwertszeit
					Bauschutt von mehr als 1.000 Mg/a in Bq/g	Bodenflächen in Bq/g	festen Stoffen bis zu 100 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 100 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	festen Stoffen bis zu 1000 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 1000 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	Gebäuden zur Wieder- und Weiterverwendung in Bq/cm ²	Gebäuden zum Abriss in Bq/cm ²	Metallschrott zur Rezyklierung in Bq/g	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tc-97	1 E+8	1 E+1	UL	1 E+2	6	8 E-2	7 E+1	6 E+1	7	6	8 E+1	7 E+2	4 E+2	2,6E+6 a
Tc-97m	1 E+7	1 E+2	4 E+1	1 E+2	9	1 E-2	1 E+3	1 E+3	2 E+2	3 E+2	1 E+2	5 E+2	1 E+3	90,2 d
Tc-99	1 E+7	1 E+0	3 E+1	1 E+2	6 E-1		7	6	7 E-1	6 E-1	7 E+1	7 E+1	4 E+1	2,1E+5 a
Tc-99m	1 E+7	1 E+2	7 E-1	1 E+1	2						1 E+1	7 E+4	1 E+2	6,0 h
Tc-101	1 E+6	1 E+2												14,2 m
Tc-104	1 E+5	1 E+1												18,3 m
Ru-94	1 E+6	1 E+2												51,8 m
Ru-97	1 E+7	1 E+1	3 E-1	1 E+1	1						1 E+1	3 E+3	1 E+2	2,9 d
Ru-103+	1 E+6	1	1 E-1	1 E+1	4	2 E-1	3 E+1	5 E+1	1 E+1	1 E+1	1 E+1	9 E+1	4 E+1	39,3 d
Ru-105+	1 E+6	1 E+1	8 E-2	1	3 E-1						1	1 E+4	1 E+1	4,4 h
Ru-106+	1 E+5	1 E-1	3 E-1	1 E+1	1	3 E-1	7 E+1	1 E+2	2 E+1	2 E+1	6	5 E+1	1	372,6 d
Rh-99	1 E+6	1 E+1	1 E-1											16,1 d
Rh-99m	1 E+6	1 E+1												4,7 h
Rh-100	1 E+6	1 E+1												20,8 h
Rh-101	1 E+7	1	3 E-1											3,2 a
Rh-101m	1 E+7	1 E+2												4,3 d
Rh-102	1 E+6	1 E-1	3 E-2											2,9 a
Rh-102m	1 E+6	1	1 E-1											219,0 d
Rh-103m	1 E+8	1 E+4	9 E+2	1 E+2	7 E+3						1 E+3	1 E+9	1 E+4	56,1 m
Rh-105	1 E+7	1 E+2	9 E-1	1 E+1	3						1 E+1	2 E+4	1 E+2	35,4 h
Rh-106m	1 E+5	1 E+1												2,2 h
Rh-107	1 E+6	1 E+2												21,7 m
Pd-100+	1 E+7	1 E+2												3,6 d
Pd-101	1 E+6	1 E+2												8,5 h
Pd-103+	1 E+8	1 E+3	9 E+1	1 E+2	3 E+2	2 E+1	1 E+3	1 E+3	1 E+3	1 E+3	1 E+2	2 E+5	3 E+2	17,0 d
Pd-107	1 E+8	1 E+3	UL											6,5E+6 a
Pd-109+	1 E+6	1 E+2	2 E+1	1 E+2	3 E+2						1 E+2	5 E+6	1 E+3	13,7 h
Ag-102	1 E+5	1 E+1												12,9 m
Ag-103	1 E+6	1 E+1												1,1 h
Ag-104	1 E+6	1 E+1												69,2 m
Ag-104m	1 E+6	1 E+1												33,5 m
Ag-105	1 E+6	1	1 E-1	1	5 E-1	1 E-1	3 E+1	4 E+1	9	4	1 E+1	9 E+1	4 E+1	41,3 d
Ag-106	1 E+6	1 E+1												24,0 m
Ag-106m	1 E+6	1 E+1												8,5 d
Ag-108m+	1 E+6	1 E-1	4 E-2	1	1 E-1	7 E-3	9	1 E+1	1	1	5 E-1	4	8 E-1	418,0 a
Ag-110m+	1 E+6	1 E-1	2 E-2	1	8 E-2	7 E-3	6	6	2	6 E-1	5 E-1	4	5 E-1	249,8 d
Ag-111	1 E+6	1 E+2	2	1 E+2	9	4 E-1	7 E+2	1 E+3	2 E+2	2 E+2	1 E+2	9 E+3	4 E+1	7,5 d
Ag-112	1 E+5	1 E+1												3,1 h
Ag-115	1 E+5	1 E+1												20,0 m
Cd-104+	1 E+7	1 E+2												57,7 m
Cd-107+	1 E+7	1 E+3												6,5 h
Cd-109+	1 E+6	1	2 E+1	1 E+2	2 E+1	3 E-2	8 E+2	4 E+3	8 E+1	4 E+2	4 E+1	4 E+3	2 E+1	462,6 d
Cd-113	1 E+6	1 E-1												7,7E+15 a
Cd-113m	1 E+6	1 E-1	4 E+1											14,6 a
Cd-115+	1 E+6	1 E+1	2 E-1	1 E+1	6 E-1						1 E+1	2 E+3	1 E+2	53,5 h
Cd-115m+	1 E+6	1 E+2	3	1 E+2	1 E+1	4 E-2	7 E+2	7 E+2	2 E+2	7 E+1	1 E+2	2 E+3	2 E+1	44,6 d
Cd-117+	1 E+6	1 E+1												2,5 h
Cd-117m+	1 E+6	1 E+1												3,4 h
In-109	1 E+6	1 E+1												4,2 h
In-110m	1 E+5	1 E+1												69,1 m
In-111+	1 E+6	1 E+1	2 E-1	1 E+1	7 E-1						1 E+1	2 E+3	1 E+2	2,8 d
In-112	1 E+6	1 E+2												14,7 m
In-113m	1 E+6	1 E+2	3 E-1	1 E+1	9 E-1						1 E+1	1 E+5	1 E+2	99,5 m
In-114	1 E+5	1 E+3	8 E-1											1,2 m
In-114m+	1 E+6	1 E+1	8 E-1	1 E+1	2	3 E-2	1 E+2	1 E+2	4 E+1	2 E+1	1 E+1	3 E+2	1 E+1	50,0 d
In-115	1 E+6	1 E+1												4,4E+14 a
In-115m	1 E+6	1 E+2	4 E-1	1 E+1	2						1 E+1	6 E+4	1 E+2	4,5 h
In-116m	1 E+5	1 E+1												54,6 m
In-117	1 E+6	1 E+1												43,2 m
In-117m+	1 E+6	1 E+2												1,9 h
In-119m+	1 E+5	1 E+2												18,0 m
Sn-110+	1 E+7	1 E+2												4,1 h
Sn-111+	1 E+6	1 E+2												35,3 m
Sn-113+	1 E+7	1	3 E-1	1 E+1	9 E-1	1 E-1	6 E+1	8 E+1	2 E+1	8	7	7 E+1	2	115,1 d
Sn-117m	1 E+6	1 E+2	5 E-1											13,6 d
Sn-119m	1 E+7	1 E+1	7 E+1											293,0 d
Sn-121	1 E+7	1 E+5												27,0 h
Sn-121m+	1 E+7	1	7 E+1											55,0 a

Radionuklid	Freigrenze in Bq	Freigrenze, uneingeschränkte Freigabe von festen u. flüssigen Stoffen in Bq/g	Aktivität HRQ in TBq	Oberflächenkontamination in Bq/cm ²	spezifische Freigabe von									Halbwertszeit
					Bauschutt von mehr als 1.000 Mg/a in Bq/g	Bodentflächen in Bq/g	festen Stoffen bis zu 100 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 100 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	festen Stoffen bis zu 1000 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 1000 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	Gebäuden zur Wieder- und Weiterverwendung in Bq/cm ²	Gebäuden zum Abriss in Bq/cm ²	Metallschrott zur Rezyklierung in Bq/g	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Sn-123	1 E+6	1 E+2	7											129,2 d
Sn-123m	1 E+6	1 E+2												40,1 m
Sn-125	1 E+5	1 E+1	1 E-1	1 E+1	7 E-1	2 E-1	6 E+1	6 E+1	2 E+1	8	1 E+1	6 E+2	2 E+1	9,6 d
Sn-126+	1 E+5	1 E-1	3 E-2											2,3E+5 a
Sn-127	1 E+6	1 E+1												2,1 h
Sn-128+	1 E+6	1 E+1												59,1 m
Sb-115	1 E+6	1 E+1												32,1 m
Sb-116	1 E+6	1 E+1												15,8 m
Sb-116m	1 E+5	1 E+1												60,3 m
Sb-117	1 E+7	1 E+2												2,8 h
Sb-118m	1 E+6	1 E+1												5,0 h
Sb-119	1 E+7	1 E+3												38,3 h
Sb-120m	1 E+6	1 E+1												5,8 d
Sb-122	1 E+4	1 E+1	1 E-1	1 E+1	5 E-1						1 E+1	1 E+3	1 E+2	2,7 d
Sb-124	1 E+6	1	4 E-2	1	5 E-1	4 E-2	9	9	3	9 E-1	1	2 E+1	5 E-1	60,2 d
Sb-125+	1 E+6	1 E-1	2 E-1	1 E+1	5 E-1	8 E-2	4 E+1	4 E+1	1 E+1	4	2	2 E+1	3	2,8 a
Sb-126	1 E+5	1 E+1	2 E-2											12,4 d
Sb-126m	1 E+5	1 E+1												19,1 m
Sb-127+	1 E+6	1 E+1												3,9 d
Sb-128m	1 E+5	1 E+1												9,0 h
Sb-129+	1 E+6	1 E+1												4,4 h
Sb-130	1 E+5	1 E+1												39,5 m
Sb-131	1 E+6	1 E+1												23,0 m
Te-116+	1 E+7	1 E+2												2,5 h
Te-121	1 E+6	1 E+1	1 E-1											19,2 d
Te-121m	1 E+6	1	1 E-1											154,0 d
Te-123	1 E+6	1 E-1												>9,2 E+16 a
Te-123m	1 E+7	1	6 E-1	1 E+1	2	7 E-3	1 E+2	1 E+2	4 E+1	3 E+1	1 E+1	2 E+2	1 E+1	119,5 d
Te-125m	1 E+7	1 E+3	1 E+1	1 E+2	6 E+1	2 E-2	1 E+3	1 E+3	5 E+2	1 E+3	1 E+2	2 E+4	6 E+1	57,4 d
Te-127	1 E+6	1 E+3	1 E+1	1 E+2	5 E+1						1 E+2	9 E+5	1 E+3	9,4 h
Te-127m+	1 E+7	1 E+1	3	1 E+2	3 E+1		3 E+2	1 E+3	3 E+1	3 E+2	1 E+2	3 E+3	5 E+1	109,0 d
Te-129	1 E+6	1 E+2	1	1 E+1	4						1 E+2	7 E+5	1 E+2	69,6 m
Te-129m+	1 E+6	1 E+1	1	1 E+1	3	2	2 E+2	3 E+2	7 E+1	3 E+1	1 E+1	8 E+2	2 E+1	33,6 d
Te-131	1 E+5	1 E+2		1 E+1	6 E-1						1 E+1	3 E+5	1 E+2	25,0 m
Te-131m+	1 E+6	1 E+1	4 E-2	1	2 E-1						1	1 E+3	1 E+1	30,0 h
Te-132+	1 E+7	1	3 E-2	1	9 E-2						1	2 E+2	1 E+2	76,3 h
Te-133	1 E+5	1 E+1		1	2 E-1						1	2 E+5	1 E+1	12,5 m
Te-133m+	1 E+5	1 E+1		1	9 E-2						1	2 E+4	1 E+1	55,4 m
Te-134	1 E+6	1 E+1		1	3 E-1						1	7 E+4	1 E+1	41,8 m
I-120	1 E+5	1 E+1												1,4 h
I-120m	1 E+5	1 E+1												53,0 m
I-121	1 E+6	1 E+2												2,1 h
I-123	1 E+7	1 E+2	5 E-1	1 E+1	2						1 E+1	3 E+4	1 E+2	13,2 h
I-124	1 E+6	1 E+1	6 E-2								1 E+1			4,2 d
I-125	1 E+6	1 E+2	2 E-1	1 E+1	3	9 E-2	8 E+2	1 E+3	8 E+1	1 E+2	1 E+1	1 E+4	3	59,4 d
I-126	1 E+6	1 E+1	1 E-1	1 E+1	5 E-1	2 E-1	4 E+1	5 E+1	1 E+1	5	1 E+1	3 E+2	2	13,0 d
I-128	1 E+5	1 E+2												25,0 m
I-129	1 E+5	1 E-2	UL	1	6 E-2		6 E-1	6 E-1	6 E-2	6 E-2	8	8	4 E-1	1,6E+7 a
I-130	1 E+6	1 E+1		1	1 E+1						1	2 E+3	1 E+1	12,4 h
I-131	1 E+6	1 E+1	2 E-1	1 E+1	6 E-1	2 E-1	5 E+1	7 E+1	2 E+1	9	1 E+1	6 E+2	2	8,0 d
I-132	1 E+5	1 E+1	3 E-2	1	1 E-1						1	8 E+3	1 E+1	2,3 h
I-132m	1 E+6	1 E+2												83,0 m
I-133	1 E+6	1 E+1	1 E-1	1 E+1	4 E-1						1 E+1	3 E+3	1 E+1	20,8 h
I-134	1 E+5	1 E+1	3 E-2	1	8 E-2						1	2 E+4	1 E+1	52,5 m
I-135+	1 E+6	1 E+1	4 E-2	1	1 E-1						1	4 E+3	1 E+1	6,6 h
Xe-120	1 E+9	1 E+2												40,0 m
Xe-121	1 E+9	1 E+2												38,8 m
Xe-122+	1 E+9	1 E+2												20,1 h
Xe-123	1 E+9	1 E+2												2,1 h
Xe-125	1 E+9	1 E+3												16,8 h
Xe-127	1 E+5	1 E+3	3 E-1											36,4 d
Xe-129m	1 E+4	1 E+3												8,9 d
Xe-131m	1 E+4	1 E+4												11,9 d
Xe-133	1 E+4	1 E+3												5,3 d
Xe-133m	1 E+4	1 E+3												2,2 d
Xe-135	1 E+10	1 E+3												9,1 h
Xe-135m	1 E+9	1 E+2												15,3 m
Xe-138	1 E+9	1 E+2												14,1 m

Radionuklid	Freigrenze in Bq	Freigrenze, uneingeschränkte Freigabe von festen u. flüssigen Stoffen in Bq/g	Aktivität HRQ in TBq	Oberflächenkontamination in Bq/cm ²	spezifische Freigabe von									Halbwertszeit
					Bauschutt von mehr als 1.000 Mg/a in Bq/g	Bodenflächen in Bq/g	festen Stoffen bis zu 100 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 100 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	festen Stoffen bis zu 1000 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 1000 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	Gebäuden zur Wieder- und Weiterverwendung in Bq/cm ²	Gebäuden zum Abriss in Bq/cm ²	Metallschrott zur Rezyklierung in Bq/g	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Cs-125	1 E+4	1 E+1												46,7 m
Cs-127	1 E+5	1 E+2												6,3 h
Cs-129	1 E+5	1 E+1		1 E+1	9 E-1						1 E+1	5 E+3	1 E+2	32,2 h
Cs-130	1 E+6	1 E+2												29,2 m
Cs-131	1 E+6	1 E+3	2 E+1	1 E+2	2 E+2	3 E+1	1 E+3	1 E+3	1 E+3	1 E+3	1 E+2	2 E+5	9 E+2	9,7 d
Cs-132	1 E+5	1 E+1		1	3 E-1						1 E+1	4 E+2	1 E+1	6,5 d
Cs-134	1 E+4	1 E-1		1	1 E-1	5 E-2	1 E+1	1 E+1	3	1	6 E-1	5	2 E-1	2,1 a
Cs-134m	1 E+5	1 E+3		1 E+2	2 E+1						1 E+2	1 E+6	1 E+3	2,9 h
Cs-135	1 E+7	1 E+2		1 E+2	2 E+1	4 E-1	3 E+2	3 E+3	3 E+1	3 E+2	1 E+2	9 E+3	2 E+1	2,3E+6 a
Cs-136	1 E+5	1	3 E-2	1	1 E-1	4 E-2	9	9	3	1	1	6 E+1	1 E+1	13,0 d
Cs-137+	1 E+4	1 E-1	1 E-1	1	4 E-1	6 E-2	1 E+1	1 E+1	8	3	2	1 E+1	6 E-1	30,0 a
Cs-138	1 E+4	1 E+1		1	9 E-2						1	3 E+4	1 E+1	33,4 m
Ba-126+	1 E+7	1 E+2												100,0 m
Ba-128+	1 E+7	1 E+2												2,4 d
Ba-131	1 E+6	1 E+1		1 E+1	5 E-1	2 E-1	4 E+1	6 E+1	1 E+1	1 E+1	1 E+1	3 E+2	9 E+1	11,6 d
Ba-131m	1 E+7	1 E+2												14,6 m
Ba-133	1 E+6	1 E-1		1			4 E+1	8 E+1	1 E+1	1 E+1			2	10,5 a
Ba-133m	1 E+6	1 E+2												38,9 h
Ba-135m	1 E+6	1 E+2												28,7 h
Ba-137m	1 E+6	1 E+1												2,6 m
Ba-139	1 E+5	1 E+2												83,1 m
Ba-140	1 E+5	1		1	8 E-2	3 E-2	1 E+1	1 E+1	3	3	1	5 E+1	1 E+1	12,8 d
Ba-141	1 E+5	1 E+1												18,3 m
Ba-142	1 E+6	1 E+1												10,6 m
La-131	1 E+6	1 E+1												59,0 m
La-132	1 E+6	1 E+1												4,8 h
La-135	1 E+7	1 E+3												19,5 h
La-137	1 E+7	1 E+2												6,0E+4 a
La-138	1 E+7	1 E-1												1,0E+11 a
La-140	1 E+5	1	3 E-2	1	1 E-1						1	4 E+2	1 E+1	40,3 h
La-141	1 E+5	1 E+2												3,9 h
La-142	1 E+5	1 E+1												91,1 m
La-143	1 E+5	1 E+2												14,1 m
Ce-134+	1 E+7	1 E+3												75,8 h
Ce-135	1 E+6	1 E+1												17,7 h
Ce-137	1 E+7	1 E+3												9,0 h
Ce-137m+	1 E+6	1 E+3												34,4 h
Ce-139	1 E+6	1		1 E+1	2	7 E-1	1 E+2	1 E+2	4 E+1	4 E+1	1 E+1	1 E+2	9	137,6 d
Ce-141	1 E+7	1 E+2		1 E+1	4	1	1 E+2	1 E+2	8 E+1	8 E+1	1 E+1	1 E+3	7 E+1	32,5 d
Ce-143	1 E+6	1 E+1		1 E+1	9 E-1						1 E+1	5 E+3	1 E+2	33,0 h
Ce-144+	1 E+5	1 E+1		1 E+2	5	4 E-1	1 E+2	1 E+2	1 E+2	1 E+2	3 E+1	2 E+2	1 E+1	285,0 d
Pr-136	1 E+5	1 E+1												13,1 m
Pr-137	1 E+6	1 E+2												76,8 m
Pr-138m	1 E+6	1 E+1												2,1 h
Pr-139+	1 E+7	1 E+2												4,4 h
Pr-142	1 E+5	1 E+2	1	1 E+1	4						1 E+2	4 E+4	1 E+2	19,1 h
Pr-142m	1 E+9	1 E+7												14,6 m
Pr-143	1 E+6	1 E+3	3 E+1	1 E+2	4 E+1	2 E+1	1 E+4	1 E+4	1 E+4	1 E+4	1 E+2	6 E+5	4 E+1	13,6 d
Pr-144	1 E+5	1 E+2												17,3 m
Pr-145	1 E+5	1 E+3												6,0 h
Pr-147	1 E+5	1 E+1												13,4 m
Nd-136+	1 E+6	1 E+2												50,7 m
Nd-138+	1 E+7	1 E+3												5,0 h
Nd-139	1 E+6	1 E+2												29,7 m
Nd-139m+	1 E+6	1 E+1												5,5 h
Nd-141	1 E+7	1 E+2												2,5 h
Nd-147	1 E+6	1 E+2	6 E-1	1 E+1	2	7 E-1	1 E+2	1 E+2	5 E+1	5 E+1	1 E+1	1 E+3	5 E+1	11 d
Nd-149	1 E+6	1 E+2		1 E+1	7 E-1						1 E+1	7 E+4	1 E+2	1,7 h
Nd-151	1 E+5	1 E+1												12,4 m
Pm-141+	1 E+5	1 E+1												20,9 m
Pm-143	1 E+6	1	2 E-1											266,0 d
Pm-144	1 E+6	1 E-1	4 E-2											1,0 a
Pm-145	1 E+7	1 E+1	1 E+1											17,7 a
Pm-146	1 E+6	1 E-1												5,5 a
Pm-147	1 E+7	1 E+3	4 E+1	1 E+2	2 E+2	2 E+1	1 E+4	1 E+4	1 E+4	1 E+4	1 E+3	2 E+4	6 E+3	2,6 a
Pm-148	1 E+5	1 E+1												5,4 d
Pm-148m	1 E+6	1	3 E-2											41,1 d
Pm-149	1 E+6	1 E+3	6	1 E+2	2 E+1						1 E+2	7 E+4	1 E+3	53,1 h

Radionuklid	Freigrenze in Bq	Freigrenze, uneingeschränkte Freigabe von festen u. flüssigen Stoffen in Bq/g	Aktivität HRQ in TBq	Oberflächenkontamination in Bq/cm ²	spezifische Freigabe von									Halbwertszeit
					Bauschutt von mehr als 1.000 Mg/a in Bq/g	Bodenflächen in Bq/g	festen Stoffen bis zu 100 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 100 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	festen Stoffen bis zu 1000 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 1000 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	Gebäuden zur Wieder- und Weiterverwendung in Bq/cm ²	Gebäuden zum Abriss in Bq/cm ²	Metallschrott zur Rezyklierung in Bq/g	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Pm-150	1 E+5	1 E+1												2,7 h
Pm-151	1 E+6	1 E+2	2 E-1											28,4 h
Sm-141	1 E+5	1 E+1												10,2 m
Sm-141m+	1 E+6	1 E+1												22,6 m
Sm-142+	1 E+7	1 E+2												72,5 m
Sm-145	1 E+7	1 E+1												340,0 d
Sm-146	1 E+5	1												1,0E+8 a
Sm-147	1 E+4	1	UL											1,1E+11 a
Sm-151	1 E+8	1 E+3	5 E+2	1 E+2	5 E+2	4 E+1	1 E+4	1 E+4	1 E+4	1 E+4	1 E+3	3 E+4	7 E+3	90,0 a
Sm-153	1 E+6	1 E+2	2	1 E+1	1 E+1						1 E+2	4 E+4	1 E+2	46,3 h
Sm-155	1 E+6	1 E+2												22,3 m
Sm-156	1 E+6	1 E+2												9,4 h
Eu-145	1 E+6	1 E+1												5,9 d
Eu-146	1 E+6	1 E+1												4,6 d
Eu-147	1 E+6	1 E+1	2 E-1											24,0 d
Eu-148	1 E+6	1	3 E-2											54,5 d
Eu-149	1 E+7	1 E+1	2											93,1 d
Eu-150	1 E+6	1 E-1												36,4 a
Eu-152	1 E+6	1 E-1	6 E-2	1	2 E-1	7 E-2	1 E+1	1 E+1	4	4	8 E-1	6	5 E-1	13,5 a
Eu-152m	1 E+6	1 E+2	2 E-1	1 E+1	7 E-1						1 E+1	1 E+4	1 E+2	9,3 h
Eu-154	1 E+6	1 E-1	6 E-2	1	2 E-1	6 E-2	1 E+1	1 E+1	4	4	7 E-1	6	5 E-1	8,6 a
Eu-155	1 E+7	1	2	1 E+1	8	2	1 E+2	1 E+2	1 E+2	1 E+2	2 E+1	3 E+2	3 E+1	4,8 a
Eu-156	1 E+6	1 E+1												15,2 d
Eu-157	1 E+6	1 E+2												15,2 h
Eu-158	1 E+5	1 E+1												45,9 m
Gd-145	1 E+5	1 E+1												23,0 m
Gd-146+	1 E+6	1	3 E-2											48,3 d
Gd-147	1 E+6	1 E+1												38,1 h
Gd-148	1 E+4	1	4 E-1											74,6 a
Gd-149	1 E+6	1 E+2												9,3 d
Gd-151	1 E+7	1 E+1												124,0 d
Gd-152	1 E+4	1												1,1E+14 a
Gd-153	1 E+7	1 E+1	1	1 E+1	6	1	1 E+2	1 E+2	1 E+2	1 E+2	1 E+1	3 E+2	2 E+1	240,4 d
Gd-159	1 E+6	1 E+2	2	1 E+2	7						1 E+2	7 E+4	1 E+3	18,5 h
Tb-147	1 E+6	1 E+1												1,7 h
Tb-149	1 E+6	1 E+1												4,1 h
Tb-150	1 E+6	1 E+1												3,5 h
Tb-151	1 E+6	1 E+1												17,6 h
Tb-153	1 E+7	1 E+2												2,3 d
Tb-154	1 E+6	1 E+1												21,5 h
Tb-155	1 E+7	1 E+2												5,3 d
Tb-156	1 E+6	1 E+1												5,2 d
Tb-156n	1 E+7	1 E+3												5,3 h
Tb-157	1 E+7	1 E+2	1 E+2											99,0 a
Tb-158	1 E+6	1 E-1	9 E-2											180,0 a
Tb-160	1 E+6	1	6 E-2	1	2 E-1	7 E-2	1 E+1	1 E+1	4	4	1	2 E+1	6 E-1	72,3 d
Tb-161	1 E+6	1 E+3												6,9 d
Dy-155	1 E+6	1 E+1												9,9 h
Dy-157	1 E+6	1 E+2												8,1 h
Dy-159	1 E+7	1 E+2	6											144,4 d
Dy-165	1 E+6	1 E+3	3	1 E+2	1 E+1						1 E+2	9 E+5	1 E+3	2,3 h
Dy-166	1 E+6	1 E+2	1	1 E+1	5						1 E+1	1 E+4	1 E+3	81,6 h
Ho-155	1 E+6	1 E+2												48,0 m
Ho-157+	1 E+6	1 E+2												12,6 m
Ho-159	1 E+6	1 E+2												33,1 m
Ho-161	1 E+7	1 E+2												2,5 h
Ho-162	1 E+7	1 E+2												15,0 m
Ho-162m+	1 E+6	1 E+1												67,0 m
Ho-164	1 E+6	1 E+3												28,6 m
Ho-164m+	1 E+7	1 E+3												37,0 m
Ho-166	1 E+5	1 E+2	2	1 E+2	1 E+1						1 E+2	7 E+4	1 E+3	26,8 h
Ho-166m	1 E+6	1 E-1	4 E-2											1,2E+3 a
Ho-167+	1 E+6	1 E+2												3,1 h
Er-161+	1 E+6	1 E+1												3,2 h
Er-165	1 E+7	1 E+3												10,4 h
Er-169	1 E+7	1 E+3	2 E+2	1 E+2	1 E+2	5 E+1	1 E+4	1 E+4	1 E+4	1 E+4	1 E+3	2 E+6	1 E+2	9,4 d
Er-171	1 E+6	1 E+2	2 E-1	1 E+1	7 E-1						1 E+1	2 E+4	1 E+2	7,5 h
Er-172	1 E+6	1 E+2												49,3 h

Radionuklid	Freigrenze in Bq	Freigrenze, uneingeschränkte Freigabe von festen u. flüssigen Stoffen in Bq/g	Aktivität HRQ in TBq	Oberflächenkontamination in Bq/cm ²	spezifische Freigabe von									Halbwertszeit
					Bauschutt von mehr als 1.000 Mg/a in Bq/g	Bodenflächen in Bq/g	festen Stoffen bis zu 100 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 100 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	festen Stoffen bis zu 1000 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 1000 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	Gebäuden zur Wieder- und Weiterverwendung in Bq/cm ²	Gebäuden zum Abriss in Bq/cm ²	Metallschrott zur Rezyklierung in Bq/g	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tm-162	1 E+6	1 E+1												21,7 m
Tm-166	1 E+6	1 E+1												7,7 h
Tm-167+	1 E+6	1 E+2	6 E-1											9,2 d
Tm-170	1 E+6	1 E+2	2 E+1	1 E+2	4 E+1	6	1 E+3	1 E+3	1 E+3	1 E+3	1 E+2	9 E+3	7 E+1	128,6 d
Tm-171	1 E+8	1 E+3	3 E+2	1 E+2	5 E+2	6 E+1	1 E+4	1 E+4	1 E+4	1 E+4	1 E+3	6 E+4	7 E+2	1,9 a
Tm-172	1 E+6	1 E+2												63,6 h
Tm-173	1 E+6	1 E+2												8,2 h
Tm-175+	1 E+6	1 E+1												15,2 m
Yb-162	1 E+7	1 E+2												18,9 m
Yb-166+	1 E+7	1 E+2												56,7 h
Yb-167	1 E+6	1 E+2												17,5 m
Yb-169	1 E+7	1 E+1	3 E-1											32,0 d
Yb-175	1 E+7	1 E+2	2	1 E+2	6						1 E+2	1 E+4	1 E+3	4,2 d
Yb-177	1 E+6	1 E+2												1,9 h
Yb-178+	1 E+6	1 E+3												74,0 m
Lu-169+	1 E+6	1 E+1												1,4 d
Lu-170	1 E+6	1 E+1												2,0 d
Lu-171	1 E+6	1 E+1												8,3 d
Lu-172	1 E+6	1 E+1	4 E-2											6,7 d
Lu-173	1 E+7	1	9 E-1											1,3 a
Lu-174	1 E+7	1	8 E-1											3,6 a
Lu-174m	1 E+7	1 E+1												142,0 d
Lu-176	1 E+6	1 E-1												4,0E+10 a
Lu-176m	1 E+6	1 E+3												3,6 h
Lu-177	1 E+7	1 E+2	2	1 E+2	9						1 E+2	1 E+4	1 E+3	6,6 d
Lu-177m+	1 E+6	1 E-1												160,3 d
Lu-178	1 E+5	1 E+2												28,4 m
Lu-178m+	1 E+5	1 E+1												23,1 m
Lu-179	1 E+6	1 E+3												4,6 h
Hf-170+	1 E+6	1 E+2												16,0 h
Hf-172+	1 E+6	1	4 E-2											1,9 a
Hf-173	1 E+6	1 E+2												23,9 h
Hf-175	1 E+6	1	2 E-1											70,0 d
Hf-177n+	1 E+5	1 E+1												51,4 m
Hf-178n+	1 E+6	1 E-1												31,0 a
Hf-179n	1 E+6	1 E+1												25,0 d
Hf-180m	1 E+6	1 E+1												5,5 h
Hf-181	1 E+6	1	1 E-1	1	4 E-1	2 E-1	1 E+1	1 E+1	9	9	9	8 E+1	1 E+1	42,4 d
Hf-182+	1 E+6	1 E-1	5 E-2											9,0E+6 a
Hf-182m+	1 E+6	1 E+1												61,5 m
Hf-183	1 E+6	1 E+1												64,0 m
Hf-184	1 E+6	1 E+2												4,1 h
Ta-172	1 E+6	1 E+1												36,8 m
Ta-173	1 E+6	1 E+1												3,1 h
Ta-174	1 E+6	1 E+1												1,1 h
Ta-175	1 E+6	1 E+1												10,5 h
Ta-176	1 E+6	1 E+1												8,1 h
Ta-177	1 E+7	1 E+2												56,4 h
Ta-178m+	1 E+6	1 E+1												2,4 h
Ta-179	1 E+7	1 E+1	6											558,0 d
Ta-180m	1 E+6	1 E+3												1,8E+15 a
Ta-180	1 E+7	1 E-1												8,1 h
Ta-182	1 E+4	1 E-1	6 E-2	1	2 E-1	6 E-2	1 E+1	1 E+1	4	4	1	1 E+1	5 E-1	114,7 d
Ta-182n+	1 E+6	1 E+2												15,8 m
Ta-183+	1 E+6	1 E+2												5,1 d
Ta-184	1 E+6	1 E+1												8,7 h
Ta-185	1 E+5	1 E+2												49,0 m
Ta-186	1 E+5	1 E+1												10,5 m
W-176	1 E+6	1 E+2												2,5 h
W-177	1 E+6	1 E+1												2,2 h
W-178+	1 E+6	1 E+2												21,6 d
W-179	1 E+7	1 E+2												37,1 m
W-181	1 E+7	1 E+1	5	1 E+2	2 E+1	4	1 E+3	1 E+3	4 E+2	4 E+2	5 E+1	2 E+3	6 E+1	121,0 d
W-185	1 E+7	1 E+3	1 E+2	1 E+2	1 E+2	3	1 E+4	1 E+4	3 E+3	1 E+4	8 E+2	4 E+5	7 E+2	75,1 d
W-187	1 E+6	1 E+1	1 E-1	1 E+1	5 E-1						1 E+1	4 E+3	1 E+2	23,9 h
W-188+	1 E+5	1 E+1	1	1 E+2	2		1 E+2	1 E+2	8 E+1	8 E+1	5 E+1	1 E+2		69,8 d
Re-177	1 E+6	1 E+1												14,0 m
Re-178	1 E+6	1 E+1												13,2 m

Radionuklid	Freigrenze in Bq	Freigrenze, uneingeschränkte Freigabe von festen u. flüssigen Stoffen in Bq/g	Aktivität HRQ in TBq	Oberflächenkontamination in Bq/cm ²	spezifische Freigabe von									Halbwertszeit
					Bauschutt von mehr als 1.000 Mg/a in Bq/g	Bodentflächen in Bq/g	festen Stoffen bis zu 100 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 100 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	festen Stoffen bis zu 1000 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 1000 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	Gebäuden zur Wieder- und Weiterverwendung in Bq/cm ²	Gebäuden zum Abriss in Bq/cm ²	Metallschrott zur Rezyklierung in Bq/g	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Re-181	1 E+6	1 E+1												19,9 h
Re-182	1 E+6	1 E+1												64,0 h
Re-184	1 E+6	1	8 E-2											37,9 d
Re-184m	1 E+6	1 E-1												168,0 d
Re-186	1 E+6	1 E+3	4	1 E+2	2 E+1						1 E+2	4 E+4	1 E+3	90,0 h
Re-186m+	1 E+7	1												1,9E+5 a
Re-187	1 E+9	1 E+3	UL											4,4E+10 a
Re-188	1 E+5	1 E+2	1	1 E+1	4						1 E+2	5 E+4	1 E+2	17,0 h
Re-188m	1 E+7	1 E+2												18,6 m
Re-189+	1 E+6	1 E+2												24,3 h
Os-180+	1 E+7	1 E+2												21,5 m
Os-181	1 E+6	1 E+1												1,8 h
Os-182	1 E+6	1 E+2												22,1 h
Os-185	1 E+6	1	1 E-1	1	3 E-1	1 E-1	1 E+1	1 E+1	7	7	3	3 E+1	5 E-1	93,8 d
Os-189m	1 E+7	1 E+4												5,8 h
Os-191+	1 E+7	1 E+2		1 E+1	7	2	1 E+2	1 E+2	1 E+2	1 E+2	1 E+1	3 E+3	9 E+1	15,3 d
Os-191m	1 E+7	1 E+3		1 E+2	2 E+2						1 E+3	2 E+6	1 E+3	13,1 h
Os-193	1 E+6	1 E+2	1	1 E+1	4						1 E+2	3 E+4	1 E+2	30,1 h
Os-194+	1 E+5	1	7 E-1											6,0 a
Ir-182	1 E+5	1 E+1												15,0 m
Ir-184	1 E+6	1 E+1												3,1 h
Ir-185	1 E+6	1 E+1												14,4 h
Ir-186	1 E+6	1 E+1												16,6 h
Ir-187	1 E+6	1 E+2												10,5 h
Ir-188	1 E+6	1 E+1												41,5 h
Ir-189+	1 E+7	1 E+2												13,2 d
Ir-190	1 E+6	1	5 E-2	1	8 E-2	6 E-2	6	8	2	2	1	5 E+1	1 E+1	11,8 d
Ir-192	1 E+4	1	8 E-2	1	3 E-1	1 E-1	1 E+1	1 E+1	6	6	1	3 E+1	2	73,8 d
Ir-192m	1 E+7	1 E+3												1,4 m
Ir-193m	1 E+7	1 E+4												10,5 d
Ir-194n	1 E+5	1 E+2	7 E-1	1 E+1	2		6	1 E+1	2	2	1 E+1	2 E+4	1 E+2	171,0 d
Ir-194	1 E+6	1 E-1												19,3 h
Ir-195	1 E+6	1 E+2												2,5 h
Ir-195m+	1 E+6	1 E+2												3,8 h
Pt-186+	1 E+6	1 E+1												2,1 h
Pt-188	1 E+6	1 E+1												10,2 d
Pt-189	1 E+6	1 E+2												10,9 h
Pt-191+	1 E+6	1 E+1		1 E+1	1						1 E+1	3 E+3	1 E+2	2,8 d
Pt-193	1 E+7	1 E+1	3 E+3											50,0 a
Pt-193m	1 E+7	1 E+3	1 E+1	1 E+2	7 E+1						1 E+2	1 E+5	1 E+3	4,3 d
Pt-195m	1 E+6	1 E+2	2											4,1 d
Pt-197	1 E+6	1 E+3	4	1 E+2	2 E+1						1 E+2	2 E+5	1 E+3	19,9 h
Pt-197m+	1 E+6	1 E+2	9 E-1	1 E+1	4						1 E+1	5 E+5	1 E+2	95,3 m
Pt-199	1 E+6	1 E+2												30,8 m
Pt-200+	1 E+6	1 E+2												12,5 h
Au-193	1 E+7	1 E+2	6 E-1											17,7 h
Au-194	1 E+6	1 E+1	7 E-2											38,0 h
Au-195	1 E+7	1 E+1	2											186,1 d
Au-198	1 E+6	1 E+1	2 E-1	1 E+1	6 E-1						1 E+1	2 E+3	1 E+2	2,7 d
Au-198m	1 E+6	1 E+1												2,3 d
Au-199	1 E+6	1 E+2	9 E-1	1 E+1	6 E-1						1 E+1	9 E+3	1 E+2	3,1 d
Au-200	1 E+5	1 E+2												48,4 m
Au-200m+	1 E+6	1 E+1												18,7 h
Au-201	1 E+6	1 E+2												26,0 m
Hg-193+	1 E+6	1 E+2												3,8 h
Hg-193m+	1 E+6	1 E+1												11,8 h
Hg-194+	1 E+6	1 E-1	7 E-2											444,0 a
Hg-195+	1 E+6	1 E+2												9,9 h
Hg-195m+	1 E+6	1 E+2	2 E-1											41,6 h
Hg-197	1 E+7	1 E+2	2	1 E+1	9						1 E+2	3 E+4	1 E+2	64,6 h
Hg-197m+	1 E+6	1 E+2	7 E-1	1 E+1	4						1 E+1	3 E+4	1 E+2	23,8 h
Hg-203	1 E+5	1 E+1	3 E-1	1 E+1	1		7 E+1	1 E+2	2 E+1	1 E+1	1 E+1	2 E+2	2	46,6 d
Tl-194	1 E+6	1 E+1												33,0 m
Tl-194m	1 E+6	1 E+1												32,8 m
Tl-195	1 E+6	1 E+1												1,2 h
Tl-197	1 E+6	1 E+2												2,8 h
Tl-198	1 E+6	1 E+1												5,3 h
Tl-198m	1 E+6	1 E+1												1,9 h

Radionuklid	Freigrenze in Bq	Freigrenze, uneingeschränkte Freigabe von festen u. flüssigen Stoffen in Bq/g	Aktivität HRQ in TBq	Oberflächenkontamination in Bq/cm ²	spezifische Freigabe von									Halbwertszeit
					Bauschutt von mehr als 1.000 Mg/a in Bq/g	Bodentflächen in Bq/g	festen Stoffen bis zu 100 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 100 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	festen Stoffen bis zu 1000 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 1000 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	Gebäuden zur Wieder- und Weiterverwendung in Bq/cm ²	Gebäuden zum Abriss in Bq/cm ²	Metallschrott zur Rezyklisierung in Bq/g	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tl-199	1 E+6	1 E+2												7,4 h
Tl-200	1 E+6	1 E+1	5 E-2	1	2 E-1						1	1 E+3	1 E+1	26,1 h
Tl-201	1 E+6	1 E+2	1	1 E+1	6						1 E+1	1 E+4	1 E+2	73,0 h
Tl-202	1 E+6	1 E+1	2 E-1	1 E+1	5 E-1	2 E-1	4 E+1	6 E+1	1 E+1	7	1 E+1	3 E+2	1 E+2	12,2 d
Tl-204	1 E+4	1	2 E+1	1 E+2	4 E+1	4 E-2	9 E+2	9 E+3	9 E+1	9 E+2	1 E+2	3 E+3	3 E+2	3,8 a
Pb-195m+	1 E+6	1 E+1												15,0 m
Pb-198	1 E+6	1 E+2												2,4 h
Pb-199	1 E+6	1 E+1												1,5 h
Pb-200	1 E+6	1 E+2												21,5 h
Pb-201	1 E+6	1 E+1												9,4 h
Pb-202+	1 E+6	1 E-1	2 E-1											5,3E+4 a
Pb-202m	1 E+6	1 E+1												3,6 h
Pb-203	1 E+6	1 E+1	2 E-1	1 E+1	9 E-1						1 E+1	3 E+3	1 E+2	51,9 h
Pb-205	1 E+7	1 E+1	UL											1,5E+7 a
Pb-209	1 E+6	1 E+5												3,3 h
Pb-210+	1 E+4	1 E-1	3 E-1	1	3 E-2		3 E+1	8 E+1	3	8	1	1	6 E-2	22,2 a
Pb-211+	1 E+6	1 E+2												36,1 m
Pb-212	1 E+7	1 E+1		1	1 E-1						1	2 E+3	1 E+1	10,6 h
Pb-212+	1 E+5	1 E+1	5 E-2	1										10,6 h
Pb-214+	1 E+6	1 E+2												26,8 m
Bi-200	1 E+6	1 E+1												36,4 m
Bi-201+	1 E+6	1 E+1												1,8 h
Bi-202	1 E+6	1 E+1												1,7 h
Bi-203+	1 E+6	1 E+1												11,8 h
Bi-205+	1 E+6	1 E+1												15,3 d
Bi-206	1 E+5	1	2 E-2	1	7 E-2						1	9 E+1	1 E+1	6,2 d
Bi-207	1 E+6	1 E-1	5 E-2	1	2 E-1	5 E-2	1 E+1	1 E+1	3	1	5 E-1	5	6 E-1	31,8 a
Bi-210	1 E+6	1 E+3	8	1 E+2	9						3 E+1	1 E+4	1 E+3	5,0 d
Bi-210m+	1 E+5	1 E-1	3 E-1											3,0E+6 a
Bi-212+	1 E+5	1 E+1	5 E-2	1	2 E-1						1	3 E+4	1 E+1	60,5 m
Bi-213+	1 E+6	1 E+2												45,6 m
Bi-214+	1 E+5	1 E+1												19,9 m
Po-203	1 E+6	1 E+1		1	1 E-1						1	4 E+4	1 E+1	36,7 m
Po-205	1 E+6	1 E+1		1	1 E-1						1	1 E+4	1 E+1	1,7 h
Po-206	1 E+6	1 E+1												8,8 d
Po-207	1 E+6	1 E+1		1	2 E-1						1	5 E+3	1 E+1	5,8 h
Po-208	1 E+4	1												2,9 a
Po-209	1 E+4	1												102,0 a
Po-210	1 E+4	1	6 E-2	1	4 E-2		1 E+1	1 E+1	3	1 E+1	1	7	1	138,4 d
At-207	1 E+6	1 E+1												1,8 h
At-211+	1 E+7	1 E+3		1 E+1	1 E+1						8	3 E+5	1 E+3	7,2 h
Rn-220+	1 E+7	1 E+4												< 10 m
Rn-222+	1 E+8	1 E+1												3,8 d
Fr-222+	1 E+5	1 E+3												14,2 m
Fr-223+	1 E+6	1 E+2												21,8 m
Ra-223+	1 E+5	1 E+2	1 E-1	1	4 E-1	1 E-2	3 E+1	6 E+1	1 E+1	2 E+1	1	3 E+2	5 E-1	11,4 d
Ra-224+	1 E+5	1 E+1	5 E-2	1	1 E-1						1	3 E+2	1 E+1	3,6 d
Ra-225	1 E+5	1 E+1		1 E-1	2 E-1		5 E+1	9 E+1	1 E+1	3 E+1	1 E-1	8 E+1	4 E-1	14,8 d
Ra-226+	1 E+4	1 E-2	4 E-2	1	3 E-2		4 E-1	5	4 E-2	5 E-1	5 E-1	9 E-1	5 E-2	1,6E+3 a
Ra-227	1 E+6	1 E+2		1 E+1	1						1 E+1	3 E+5	1 E+2	42,2 m
Ra-228+	1 E+5	1 E-1	3 E-2	1	1 E-1		5	8	2	2	4 E-1	4	7 E-1	5,8 a
Ac-224+	1 E+6	1 E+2												2,8 h
Ac-225+	1 E+4	1 E+1												10,0 d
Ac-226+	1 E+5	1 E+2												29,4 h
Ac-227+	1 E+3	1 E-2	4 E-2	1			1 E-1	1 E-1	1 E-1	1 E-1			3 E-2	21,8 a
Ac-228	1 E+6	1 E+1	3 E-2	1	2 E-1						1	7 E+3	1 E+1	6,2 h
Th-226+	1 E+7	1 E+3		1 E+1	3 E+1						1 E+2	1 E+7	1 E+3	30,6 m
Th-227	1 E+4	1 E+1		1 E-1	2 E-1		1 E+1	1 E+1	7	1 E+1	1 E-1	6 E+1	3 E-1	18,7 d
Th-228+	1 E+4	1 E-1	4 E-2	1 E-1	7 E-2		1	1	1	1	1 E-1	3	4 E-1	1,9 a
Th-229+	1 E+3	1 E-1	1 E-2	1 E-1	2 E-2		1	1	1	1	1 E-1	9 E-1	1 E-1	7,3E+3 a
Th-230	1 E+4	1 E-1		1 E-1	5 E-2		5 E-1	1	5 E-2	3 E-1	1 E-1	3	3 E-1	7,5E+4 a
Th-231	1 E+7	1 E+3	1 E+1	1 E+2	4 E+1						1 E+2	3 E+5	1 E+3	25,5 h
Th-232	1 E+4	1 E+1		1 E-1	3 E-2		7 E-1	5	7 E-2	7 E-1	1 E-1	1	3 E-1	1,4E+10 a
Th-232+	1 E+3	1 E-2	UL	1 E-1			7 E-1	1	7 E-2	1 E-1			1 E-1	1,4E+10 a
Th-234+	1 E+5	1 E+2	2	1 E+2	1 E+1		9 E+2	1 E+3	3 E+2	3 E+2	1 E+2	4 E+3	1 E+1	24,1 d
Pa-227+	1 E+6	1 E+3												38,3 m
Pa-228+	1 E+6	1 E+1												22,0 h
Pa-230+	1 E+6	1 E+1	1 E-1	1	4 E-1	1 E-1	1 E+1	1 E+1	8	8	1 E+1	2 E+2	1 E+1	17,4 d

Radionuklid	Freigrenze in Bq	Freigrenze, uneingeschränkte Freigabe von festen u. flüssigen Stoffen in Bq/g	Aktivität HRQ in TBq	Oberflächenkontamination in Bq/cm ²	spezifische Freigabe von									Halbwertszeit
					Bauschutt von mehr als 1.000 Mg/a in Bq/g	Bodenflächen in Bq/g	festen Stoffen bis zu 100 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 100 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	festen Stoffen bis zu 1000 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 1000 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	Gebäuden zur Wieder- und Weiterverwendung in Bq/cm ²	Gebäuden zum Abriss in Bq/cm ²	Metallschrott zur Rezyklierung in Bq/g	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Pa-231	1 E+3	1 E-2		1 E-2	4 E-3		1 E-1	1	1 E-2	1 E-1	1 E-2	1 E-1	2 E-1	3,3E+4 a
Pa-232	1 E+6	1 E+1												1,3 d
Pa-233	1 E+7	1 E+1	4 E-1	1 E+1	1	4 E-1	8 E+1	1 E+2	2 E+1	2 E+1	1 E+1	4 E+2	6 E+1	27,0 d
Pa-234	1 E+6	1 E+1												6,8 h
U-230+	1 E+5	1 E+1	4 E-2	1 E-1	2 E-1		1 E+1	1 E+1	9	1 E+1	1 E-1	8 E+1	9 E-1	20,8 d
U-231	1 E+7	1 E+2		1 E+1	6						1 E+1	1 E+4	1 E+2	4,2 d
U-232+	1 E+3	1 E-1	6 E-2	1 E-1	5 E-2		1	1	5 E-1	1	1 E-1	1	3 E-1	69,8 a
U-233	1 E+4	1	7 E-2	1	3 E-1		5	1 E+1	5 E-1	4	1	1 E+1	3	1,6E+5 a
U-234	1 E+4	1		1	4 E-1		6	1 E+1	6 E-1	2	1	1 E+1	2	2,5E+5 a
U-235+	1 E+4	1	8 E-5	1	3 E-1		3	4	3 E-1	4 E-1	1	1 E+1	8 E-1	7,0E+8 a
U-236	1 E+4	1 E+1	2 E-1	1	4 E-1		6	1 E+1	6 E-1	6	2	1 E+1	3	2,4E+7 a
U-237	1 E+6	1 E+2		1 E+1	3						1 E+1	3 E+3	1 E+2	6,8 d
U-238+	1 E+4	1	UL	1	4 E-1		6	1 E+1	6 E-1	5	2	1 E+1	2	4,5E+9 a
U-238sec	1 E+3	1		1			3 E-1	1	3 E-2	3 E-1			4 E-2	4,5E+9 a
U-239	1 E+6	1 E+2		1 E+2	9						1 E+2	4 E+6	1 E+2	23,5 m
U-240+	1 E+6	1 E+2		1 E+1	7 E-1						1 E+1	9 E+3	1 E+3	14,1 h
Np-232	1 E+6	1 E+1												14,7 m
Np-233	1 E+7	1 E+2												36,2 m
Np-234	1 E+6	1 E+1												4,4 d
Np-235	1 E+7	1 E+2	1 E+2											395,9 d
Np-236m	1 E+7	1												22,5 h
Np-236	1 E+5	1 E+3												1,5E+5 a
Np-237+	1 E+3	1	7 E-2	1 E-1	1 E-1		1	1	1 E-1	1	1 E-1	5	6 E-1	2,1E+6 a
Np-238	1 E+6	1 E+2												2,1 d
Np-239	1 E+7	1 E+2	5 E-1	1 E+1	2						1 E+1	6 E+3	1 E+2	2,4 d
Np-240	1 E+6	1 E+1		1	2 E-1						1	4 E+4	1 E+1	65,0 m
Pu-234	1 E+7	1 E+2		1 E+1	4						1 E+1	8 E+4	1 E+2	8,8 h
Pu-235	1 E+7	1 E+2		1 E+1	3						1 E+1	1 E+6	1 E+2	25,3 m
Pu-236	1 E+4	1	1 E-1	1 E-1	2 E-1	1 E-1	1 E+1	1 E+1	6	1 E+1	1 E-1	7	7 E-1	2,9 a
Pu-237	1 E+7	1 E+2	2	1 E+2	9	2	5 E+2	1 E+3	1 E+2	1 E+2	1 E+2	2 E+3	5 E+2	45,3 d
Pu-238	1 E+4	1 E-1	6 E-2	1 E-1	8 E-2	6 E-2	1	1	1	1	1 E-1	3	3 E-1	87,7 a
Pu-239+	1 E+4	1 E-1	6 E-2	1 E-1	8 E-2	4 E-2	1	1	5 E-1	1	1 E-1	2	2 E-1	2,4E+4 a
Pu-240	1 E+3	1 E-1	6 E-2	1 E-1	8 E-2	4 E-2	1	1	6 E-1	1	1 E-1	2	2 E-1	6,6E+3 a
Pu-241+	1 E+5	1 E+1	3	1 E+1	2	4	1 E+2	1 E+2	4 E+1	1 E+2	1 E+1	9 E+1	1 E+1	14,3 a
Pu-242	1 E+4	1 E-1	7 E-2	1 E-1	4 E-2	4 E-2	1	1	5 E-1	1	1 E-1	2	3 E-1	3,7E+5 a
Pu-243	1 E+7	1 E+3		1 E+2	2 E+1						1 E+2	7 E+5	1 E+3	5,0 h
Pu-244+	1 E+4	1 E-1	3 E-4	1 E-1	4 E-2	4 E-2	1	1	3 E-1	1	1 E-1	3	3 E-1	8,0E+7 a
Pu-245+	1 E+6	1 E+2												10,5 h
Pu-246+	1 E+6	1 E+2												10,9 d
Am-237+	1 E+6	1 E+2												73,0 m
Am-238	1 E+6	1 E+1												1,6 h
Am-239	1 E+6	1 E+2												11,9 h
Am-240	1 E+6	1 E+1												50,8 h
Am-241	1 E+4	1 E-1	6 E-2	1 E-1	5 E-2	6 E-2	1	1	1	1	1 E-1	3	3 E-1	432,8 a
Am-242	1 E+6	1 E+3		1 E+2	3 E+1						1 E+2	3 E+5	1 E+3	16,0 h
Am-242m+	1 E+4	1 E-1	3 E-1	1 E-1	9 E-2	7 E-2	1	1	1	1	1 E-1	3	3 E-1	141,0 a
Am-243+	1 E+3	1 E-1	2 E-1	1 E-1	9 E-2	5 E-2	1	1	9 E-1	1	1 E-1	3	3 E-1	7,4E+3 a
Am-244	1 E+6	1 E+1	9 E-2											10,1 h
Am-244m	1 E+7	1 E+4												26,0 m
Am-245	1 E+6	1 E+3												2,1 h
Am-246	1 E+5	1 E+1												39,0 m
Am-246m	1 E+6	1 E+1												25,0 m
Cm-238+	1 E+7	1 E+2												2,4 h
Cm-240	1 E+5	1 E+2	3 E-1											27,0 d
Cm-241	1 E+6	1 E+1												32,8 d
Cm-242	1 E+5	1 E+1	4 E-2	1	7 E-1	4 E-1	8 E+1	1 E+2	2 E+1	5 E+1	1	4 E+1	5	162,9 d
Cm-243	1 E+4	1	2 E-1	1 E-1	1 E-1	7 E-2	1	1	1	1	1 E-1	4	4 E-1	30,0 a
Cm-244	1 E+4	1	5 E-2	1 E-1	8 E-2	8 E-2	1 E+1	1 E+1	5	1 E+1	1 E-1	5	5 E-1	18,0 a
Cm-245	1 E+3	1 E-1	9 E-2	1 E-1	4 E-2	5 E-2	1	1	6 E-1	1	1 E-1	2	3 E-1	8,5E+3 a
Cm-246	1 E+3	1 E-1	2 E-1	1 E-1	5 E-2	5 E-2	1	1	1	1	1 E-1	3	3 E-1	4,7E+3 a
Cm-247+	1 E+4	1 E-1		1 E-1	1 E-1	4 E-2	1	1	3 E-1	1	1 E-1	3	3 E-1	1,6E+7 a
Cm-248	1 E+3	1 E-1	5 E-3	1 E-2	3 E-2	1 E-2	1	1	2 E-1	1	1 E-1	1	8 E-2	3,4E+5 a
Cm-249	1 E+6	1 E+3												64,2 m
Cm-250+	1 E+3	1 E-2												8,0E+3 a
Bk-245	1 E+6	1 E+2												4,9 d
Bk-246+	1 E+6	1 E+1												1,8 d
Bk-247	1 E+4	1 E-1	8 E-2											1,4E+3 a
Bk-249+	1 E+6	1 E+2		1 E+1	2 E+1		9 E+2	1 E+3	3 E+2	7 E+2	8 E+1	1 E+3	2 E+2	320,0 d

Radionuklid	Freigrenze in Bq	Freigrenze, uneingeschränkte Freigabe von festen u. flüssigen Stoffen in Bq/g	Aktivität HRQ in TBq	Oberflächenkontamination in Bq/cm ²	spezifische Freigabe von								Halbwertszeit	
					Bauschutt von mehr als 1.000 Mg/a in Bq/g	Bodentflächen in Bq/g	festen Stoffen bis zu 100 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 100 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	festen Stoffen bis zu 1000 Mg/a zur Beseitigung auf Deponien in Bq/g	Stoffen bis zu 1000 Mg/a zur Beseitigung in Verbrennungsanlagen in Bq/g	Gebäuden zur Wieder- und Weiterverwendung in Bq/cm ²	Gebäuden zum Abriss in Bq/cm ²		Metallschrott zur Rezyklierung in Bq/g
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Bk-250	1 E+6	1 E+1												3,2 h
Cf-244	1 E+7	1 E+4												19,4 m
Cf-246	1 E+6	1 E+3		1 E+1							1 E+1	4 E+4	1 E+3	35,7 h
Cf-248	1 E+4	1		1	4 E-1		1 E+1	1 E+1	1 E+1	1 E+1	1	2 E+1	3	333,5 d
Cf-249	1 E+3	1 E-1	1 E-1	1 E-1	6 E-2		1	1	1	1	1 E-1	2	4 E-1	351,0 a
Cf-250	1 E+4	1	1 E-1	1 E-1	1 E-1		1 E+1	1 E+1	4	8	1 E-1	4	9 E-1	13,1 a
Cf-251	1 E+3	1 E-1	1 E-1	1 E-1	5 E-2		1	1	1	1	1 E-1	2	4 E-1	898,0 a
Cf-252	1 E+4	1	2 E-2	1 E-1	2 E-1		1 E+1	1 E+1	7	1 E+1	1 E-1	7	1	2,6 a
Cf-253+	1 E+5	1 E+2		1	1 E-1		1 E+2	1 E+2	7 E+1	1 E+2	9	1 E+3	4 E+1	17,8 d
Cf-254	1 E+3	1	3 E-4	1 E-1	1 E-1		1	1	1	1	1 E-1	1 E+1	7 E-1	60,5 d
Es-250	1 E+6	1 E+2												8,6 h
Es-251	1 E+7	1 E+2												33,0 h
Es-253	1 E+5	1 E+2		1	1		1 E+2	1 E+2	5 E+1	1 E+2	1	4 E+2	8	20,5 d
Es-254+	1 E+4	1 E-1		1	3 E-1		1 E+1	1 E+1	4	5	1	1 E+1	3	275,7 d
Es-254m+	1 E+6	1 E+1		1	4 E-1						2	2 E+3	1 E+2	39,3 h
Fm-252	1 E+6	1 E+3												25,4 h
Fm-253	1 E+6	1 E+2												3,0 d
Fm-254	1 E+7	1 E+4		1 E+2	3 E+1						1 E+2	2 E+6	1 E+4	3,2 h
Fm-255	1 E+6	1 E+2		1 E+1	1 E+1						1 E+1	9 E+4	1 E+4	20,1 h
Fm-257	1 E+5	1												100,5 d
Md-257	1 E+7	1 E+2												5,5 h
Md-258+	1 E+5	1 E+1												51,5 d