

I-4. Reprocessing facility

Facility	Measured point	Measured object	(Bq/cm ³)				Detection limit value
			First three months (Apr. to Jun.)		Second three months (Jul. to Sep.)		
			Mean value	Maximum value	Mean value	Maximum value	
Japan Atomic Energy Agency, Tokai R&D Center, Nuclear Fuel Cycle Engineering Laboratories	Exhaust outlet or exhaust monitoring equipment (main stack, first sub stack, and second sub stack)	Total alpha radioactivity	ND	ND	ND	ND	1.5×10 ¹⁰
		Total beta and gamma radioactivity (excluding ⁸⁵ Kr, ³ H, ¹⁴ C, ¹³¹ I, and ¹²⁹ I)	ND	ND	ND	ND	1.5×10 ⁹
		⁸⁵ Kr	1.1×10 ⁻¹	1.7	2.4×10 ⁻³	4.9×10 ⁻³	-
		³ H	3.3×10 ⁻⁴	4.6×10 ⁻⁴	2.3×10 ⁻⁴	3.3×10 ⁻⁴	-
		¹⁴ C	4.2×10 ⁻⁵	6.0×10 ⁻⁵	ND	ND	4.0×10 ⁻⁵
		¹³¹ I	ND	ND	ND	ND	3.7×10 ⁻⁸
		¹²⁹ I	4.0×10 ⁻⁸	5.4×10 ⁻⁸	ND	ND	3.7×10 ⁻⁸
		Total alpha radioactivity	ND	ND	ND	ND	1.1×10 ⁻³
		Total beta radioactivity (excluding tritium.)	ND	ND	ND	ND	2.2×10 ⁻²
		⁹⁰ Sr	ND	ND	ND	ND	2.2×10 ⁻³
	⁹⁰ Sr	ND	ND	ND	ND	1.1×10 ⁻³	
	⁹³ Zr- ⁹⁵ Nb	ND	ND	ND	ND	4.3×10 ⁻³	
	¹⁰³ Ru	ND	ND	ND	ND	1.1×10 ⁻³	
	¹⁰⁵ Ru- ¹⁰⁶ Rh	ND	ND	ND	ND	3.2×10 ⁻²	
	¹³⁴ Cs	ND	ND	ND	ND	1.1×10 ⁻³	
	¹³⁷ Cs	ND	ND	ND	ND	1.8×10 ⁻³	
	¹⁴⁴ Ce	ND	ND	ND	ND	2.2×10 ⁻³	
	¹⁴⁴ Ce- ¹⁴⁴ Pr	ND	ND	ND	ND	2.2×10 ⁻²	
	³ H	9.9×10 ²	3.0×10 ³	8.8×10	1.7×10 ²	-	
	¹²⁹ I	ND	ND	2.0×10 ⁻³	2.8×10 ⁻³	1.4×10 ⁻³	
	¹³¹ I	ND	ND	ND	ND	1.8×10 ⁻³	
	Pu(a)	1.5×10 ⁻⁴	1.8×10 ⁻⁴	5.6×10 ⁻⁵	1.1×10 ⁻⁴	-	

Facility	Measured point	Measured object	(Bq/cm ³)				Detection limit value	
			First three months (Apr. to Jun.)		Second three months (Jul. to Sep.)			
			Mean value	Maximum value	Mean value	Maximum value		
Japan Nuclear Fuel Limited, Reprocessing Plant	Exhaust outlet of main exhaust stack	⁸⁵ Kr	1.2×10 ³	2.8×10 ¹	6.1×10 ²	4.3×10 ¹	-	
		³ H	3.8×10 ⁻⁴	1.8×10 ⁻³	1.1×10 ⁻³	5.6×10 ⁻³	-	
		¹⁴ C	4.6×10 ⁻⁵	3.2×10 ⁻⁴	2.2×10 ⁻⁴	1.2×10 ⁻³	-	
		¹²⁹ I	1.2×10 ⁻⁸	7.3×10 ⁻⁸	3.3×10 ⁻⁸	1.7×10 ⁻⁷	-	
		¹³¹ I	1.9×10 ⁻¹⁰	1.1×10 ⁻⁹	5.6×10 ⁻¹⁰	2.1×10 ⁻⁹	-	
		Other nuclides (nuclides that emit alpha rays)	ND	ND	ND	ND	4×10 ⁻¹⁰ (Note 1)	
		Other nuclides (nuclides that do not emit alpha rays)	ND	ND	ND	ND	4×10 ⁻⁹ (Note 2)	
		Pu(a)	ND	ND	ND	ND	4×10 ⁻¹⁰	
		¹⁰⁶ Ru/ ¹⁰⁶ Rh	ND	ND	ND	ND	4×10 ⁻⁹	
		¹³⁷ Cs/ ^{137m} Ba	ND	ND	ND	ND	4×10 ⁻⁹	
		⁹⁰ Sr/ ⁹⁰ Y	ND	ND	ND	ND	4×10 ⁻¹⁰	
		⁸⁵ Kr	ND	ND	ND	ND	2×10 ⁻²	
		³ H	1.6×10 ⁻⁵	2.5×10 ⁻⁵	1.4×10 ⁻⁵	1.7×10 ⁻⁵	-	
		¹²⁹ I	ND	ND	ND	ND	4×10 ⁻⁸	
		Other nuclides (nuclides that do not emit alpha rays)	ND	ND	ND	ND	4×10 ⁻⁹ (Note 2)	
	Exhaust outlet or exhaust monitoring equipment	Exhaust outlet of ventilation stack of spent fuel receiving and storage building	³ H	6.8×10 ⁻⁸	8.8×10 ⁻⁷	ND	ND	4×10 ⁻⁵
		Other nuclides (nuclides that emit alpha rays)	ND	ND	ND	ND	4×10 ⁻¹⁰ (Note 1)	
		Other nuclides (nuclides that do not emit alpha rays)	ND	ND	ND	ND	4×10 ⁻⁹ (Note 2)	
		Exhaust outlet of ventilation stack of low-level waste treatment building	³ H	6.8×10 ⁻⁸	8.8×10 ⁻⁷	ND	ND	4×10 ⁻⁵
		Other nuclides (nuclides that emit alpha rays)	ND	ND	ND	ND	4×10 ⁻¹⁰ (Note 1)	
		Other nuclides (nuclides that do not emit alpha rays)	ND	ND	ND	ND	4×10 ⁻⁹ (Note 2)	
		Exhaust outlet of ventilation stack of hull end piece and first vitrified waste storage building	³ H	6.8×10 ⁻⁸	8.8×10 ⁻⁷	ND	ND	4×10 ⁻⁵
		Other nuclides (nuclides that emit alpha rays)	ND	ND	ND	ND	4×10 ⁻¹⁰ (Note 1)	
		Other nuclides (nuclides that do not emit alpha rays)	ND	ND	ND	ND	4×10 ⁻⁹ (Note 2)	
		Exhaust outlet of cooling air outlet shaft of high-level liquid waste vitrification building	Radioactive argon	ND	ND	ND	ND	1×10 ⁻⁴
	Exhaust outlet of cooling air outlet shaft of first vitrified waste storage building	Radioactive argon	ND	ND	ND	ND	1×10 ⁻⁴	
	Sea discharge outlet of sea discharge monitoring equipment	³ H	1.5×10 ⁴	6.1×10 ⁴	7.0×10 ³	7.5×10 ⁴	-	
		¹²⁹ I	2.1×10 ⁻³	1.2×10 ⁻²	2.2×10 ⁻³	3.5×10 ⁻²	-	
		¹³¹ I	3.6×10 ⁻⁴	3.3×10 ⁻³	ND	ND	2×10 ²	
		Other nuclides (nuclides that emit alpha rays)	ND	ND	ND	ND	4×10 ⁻⁵ (Note 1)	
		Other nuclides (nuclides that do not emit alpha rays)	ND	ND	ND	ND	4×10 ⁻² (Note 2)	
		Pu(a)	ND	ND	ND	ND	1×10 ⁻³	
		²⁴¹ Pu	ND	ND	ND	ND	3×10 ⁻²	
		Am(a)	ND	ND	ND	ND	6×10 ⁻⁵	
		Cm(a)	ND	ND	ND	ND	6×10 ⁻⁵	
		⁶⁰ Co	ND	ND	ND	ND	2×10 ⁻²	
¹⁰⁶ Ru/ ¹⁰⁶ Rh		ND	ND	ND	ND	2×10 ⁻²		
¹³⁴ Cs		ND	ND	ND	ND	2×10 ⁻²		
¹³⁷ Cs/ ^{137m} Ba		ND	ND	ND	ND	2×10 ⁻²		
¹⁴⁴ Ce/ ^{144m} Pr, ¹⁴⁴ Pr		ND	ND	ND	ND	2×10 ⁻²		
¹⁵⁴ Eu		ND	ND	ND	ND	2×10 ⁻²		
⁹⁰ Sr/ ⁹⁰ Y	ND	ND	ND	ND	7×10 ⁻⁴			

(Note 1) The detection limit values of other nuclides (nuclides that emit alpha rays) are written with the values of total alpha as representatives.

(Note 2) The detection limit values of other nuclides (nuclides that do not emit alpha rays) are written with the values of total beta(r) as representatives.