

(4) Reprocessing Facility (liquid waste)

Japan Atomic Energy Agency, Reprocessing Facility		Tritium [³ H] (Bq)	Iodine [¹²⁹ I] (Bq)	Iodine [¹³¹ I] (Bq)
	Annual release	4.6×10 ¹¹	N.D.	N.D.
	Annual release control target value	1.9×10 ¹⁵	2.7×10 ¹⁰	1.2×10 ¹¹
Japan Nuclear Fuel Ltd. Reprocessing Plant (reprocessing facility)		Tritium [³ H] (Bq)	Iodine [¹²⁹ I] (Bq)	Iodine [¹³¹ I] (Bq)
	Annual release	3.6×10 ¹⁴	2.1×10 ⁸	4.9×10 ⁷
	Annual release control target value	1.8×10 ¹⁶	4.3×10 ¹⁰	1.7×10 ¹¹
Japan Atomic Energy Agency, Reprocessing Facility		-	Strontium [⁸⁹ Sr] (Bq)	Strontium [⁹⁰ Sr] (Bq)
	Annual release	-	N.D.	N.D.
	Annual release control target value	-	1.6×10 ¹⁰	3.2×10 ¹⁰
Japan Nuclear Fuel Ltd. Reprocessing Plant (reprocessing facility)		Other nuclides (nuclides that do not emit alpha rays)/ Breakdown (by nuclide)		
		Cobalt [⁶⁰ Co] (Bq)	-	Strontium - Yttrium [⁹⁰ Sr- ⁹⁰ Y] (Bq)
	Annual release	N.D.	-	N.D.
	Annual release control target value	-		
Japan Atomic Energy Agency Reprocessing facility		Cerium - Praseodymium [¹⁴⁴ Ce- ¹⁴⁴ Pr] (Bq)	-	-
	Annual release	N.D.	-	-
	Annual release control target value	1.2×10 ¹¹	-	-
Japan Nuclear Fuel Ltd. Reprocessing Plant (reprocessing facility)		Other nuclides (nuclides that do not emit alpha rays)/ Breakdown (by nuclide)		
		Cerium - Praseodymium [¹⁴⁴ Ce- ^{144m} Pr, ¹⁴⁴ Pr] (Bq)	Europium [¹⁵⁴ Eu] (Bq)	Plutonium [²⁴¹ Pu] (Bq)
	Annual release	N.D.	N.D.	N.D.
	Annual release control target value	-		

(4) Reprocessing Facility (liquid waste) (cont.)

Total alpha radioactivity (Bq)	Plutonium [Pu (alpha)] (Bq)	-	-	Total beta radioactivity (excluding ^3H) (Bq)
N.D.	4.3×10^5	-	-	N.D.
4.1×10^9	2.3×10^9	-	-	9.6×10^{11}
Other nuclides (nuclides that emit alpha rays) (Bq)	Breakdown of the left column (by nuclide)			Other nuclides (nuclides that do not emit alpha rays) (Bq)
	Plutonium [Pu (alpha)] (Bq)	Americium [Am (a)] (Bq)	Curium [Cm (a)] (Bq)	
N.D.	N.D.	N.D.	N.D.	N.D.
3.8×10^9	-			2.1×10^{11}

Zirconium - Niobium [^{95}Zr - ^{95}Nb] (Bq)	Ruthenium [^{103}Ru] (Bq)	Ruthenium - Rhodium [^{106}Ru - ^{106}Rh] (Bq)	Cesium [^{134}Cs] (Bq)	Cesium [^{137}Cs] (Bq)	Cerium [^{141}Ce] (Bq)
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
4.1×10^{10}	6.4×10^{10}	5.1×10^{11}	6.0×10^{10}	5.5×10^{10}	5.9×10^9
Other nuclides (nuclides that do not emit alpha rays)/Breakdown (by nuclide)					
-	-	Ruthenium - Rhodium [^{106}Ru - ^{106}Rh] (Bq)	Cesium [^{134}Cs] (Bq)	Cesium - Barium [^{137}Cs - $^{137\text{m}}\text{Ba}$] (Bq)	-
-	-	N.D.	N.D.	N.D.	-
-					

Notes: The radioactivity (Bq) of radioactive liquid waste is obtained by multiplying the concentration of the radioactive material (Bq/cm³) in the released liquid by the amount of released liquid.

Values lower than the detection limit of radioactivity are indicated as N.D.

- The detection limits are as follows. (Bq/cm³)

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^{129}I : 1.4×10^{-3} or less

^{131}I : 1.8×10^{-3} or less

Total alpha radioactivity : 1.1×10^{-3} or less

Total beta radioactivity (excluding ^3H) : 2.2×10^{-2} or less

^{89}Sr : 2.2×10^{-3} or less

^{90}Sr : 1.1×10^{-3} or less

^{95}Zr - ^{95}Nb : 4.3×10^{-3} or less

^{103}Ru : 1.1×10^{-3} or less

^{106}Ru - ^{106}Rh : 3.2×10^{-2} or less

^{134}Cs : 1.1×10^{-3} or less

^{137}Cs : 1.8×10^{-3} or less

^{141}Ce : 2.2×10^{-3} or less

^{144}Ce - ^{144}Pr : 2.2×10^{-2} or less

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Other nuclides (nuclides that emit alpha rays) : 4×10^{-3} or less
(The value for all alpha values was used.)

Pu (alpha) : 1×10^{-3} or less

Am (alpha) : 6×10^{-5} or less

Cm (alpha) : 6×10^{-5} or less

Other nuclides (nuclides that do not emit alpha rays) : 4×10^{-2} or less
(The value for all beta (gamma) values was used.)

^{60}Co : 2×10^{-2} or less

^{90}Sr - ^{90}Y : 7×10^{-4} or less

^{106}Ru - ^{106}Rh : 2×10^{-2} or less

^{134}Cs : 2×10^{-2} or less

^{137}Cs - $^{137\text{m}}\text{Ba}$: 2×10^{-2} or less

^{144}Ce - $^{144\text{m}}\text{Pr}$, ^{144}Pr : 2×10^{-2} or less

^{154}Eu : 2×10^{-2} or less

^{241}Pu : 3×10^{-2} or less