(4) Reprocessing Facilities (Liquid Waste)

*1 Japan Atomic Energy Agency Tokai Research and Development Center Nuclear Fuel Cycle Engineering Laboratories (Reprocessing Facilities)		Tritium [^{3}H] (Bq)	Iodine [^{129}I] (Bq)	Iodine [^{131}I] (Bq)
	Annual release	4.0×10^{13}	1.3×10^{7}	N.D.
	Annual release Target control level	1.9×10^{15}	2.7×10^{10}	1.2×10^{11}
*2 Japan Nuclear Fuel Limited Reprocessing Plant (Reprocessing Facilities)		Tritium [^{3}H] (Bq)	Iodine [^{129}I] (Bq)	Iodine [^{131}I] (Bq) *3
	Annual release	4.9×10^{14}	9.4×10^{7}	3.1×10^{6}
	Annual release Target control level	1.8×10^{16}	4.3×10^{10}	1.7×10^{11}

*1 Japan Atomic Energy Agency Tokai Research and Development Center Nuclear Fuel Cycle Engineering Laboratories (Reprocessing Facilities)			Strontium [^{89}Sr] (Bq)	Strontium [^{90}Sr] (Bq)
	Annual release		N.D.	N.D.
	Annual release Target control level		1.6×10^{10}	3.2×10^{10}
*2 Japan Nuclear Fuel Limited Reprocessing Plant (Reprocessing Facilities)		Other radionuclides (nuclides that do not emit α rays)		
		Cobalt [^{60}Co] (Bq) *3		Strontium -Yttrium [^{90}Sr-^{90}Y] (Bq) *3
	Annual release	N.D.		N.D.
	Annual release Target control level	-		

*1 Japan Atomic Energy Agency Tokai Research and Development Center Nuclear Fuel Cycle Engineering Laboratories (Reprocessing Facilities)		Cerium - Praseodymium [^{144}Ce-^{144}Pr] (Bq)		
	Annual release	N.D.		
	Annual release Target control level	1.2×10^{11}		
*2 Japan Nuclear Fuel Limited Reprocessing Plant (Reprocessing Facilities)		Other radionuclides (nuclides that do not emit α rays)		
		Cerium - Praseodymium [^{144}Ce-^{144m}Pr,^{144}Pr] (Bq) *3	Europium [^{154}Eu] (Bq) *3	Plutonium [^{241}Pu] (Bq) *3
	Annual release	N.D.	N.D.	N.D.
	Annual release Target control level	-		

(4) Reprocessing Facilities (Liquid Waste) (cont.)

Total α radioactivity (Bq)	Plutonium [Pu (α)] (Bq)			Total β radioactivity (excluding ^{3}H) (Bq)
N.D.	3.9×10^{6}			N.D.
4.1×10^{9}	2.3×10^{9}			9.6×10^{11}
Other radionuclides (nuclides that emit α rays) (Bq)	Radionuclide(s) categorized into the left group			Other radionuclides (nuclides that do not emit α rays) (Bq)
	Plutonium [Pu (α)] (Bq) *3	Americium [Am (α)] (Bq) *3	Curium [Cm (α)] (Bq) *3	
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 radionuclides (nuclides that do not emit α rays)					
		Ruthenium -Rhodium [^{106}Ru-^{106}Rh] (Bq) *3	Cesium [^{134}Cs] (Bq) *3	Cesium -Barium [^{137}Cs-^{137m}Ba] (Bq) *3	
		N.D.	N.D.	N.D.	
-					

Note: The radioactivity (Bq) of radioactive liquid waste is obtained by multiplying the concentration of the radioactive material (Bq/cm^3) in the released liquid by the amount of released liquid cm^3.

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

The detection limits are as follows.

^{3}H : 3.7×10^{0} (Bq/cm^3) or lower (*1)

^{129}I : 1.4×10^{-3} (Bq/cm^3) or lower (*1)

^{131}I : 1.8×10^{-3} (Bq/cm^3) or lower (*1)

Total α radioactivity : 1.1×10^{-3} (Bq/cm^3) or lower (*1)

Other radionuclides (nuclides that emit α rays)

: 4×10^{-3} (Bq/cm^3) or lower (*2)

(Represented by a value relative to total α)

Pu (α) : 3.7×10^{-5} (Bq/cm^3) or lower (*1)

: 1×10^{-3} (Bq/cm^3) or lower (*2)

Am (α) : 6×10^{-5} (Bq/cm^3) or lower (*2)

Cm (α) : 6×10^{-5} (Bq/cm^3) or lower (*2)

Total ß radioactivity (excluding ^{3}H)

: 2.2×10^{-2} (Bq/cm^3) or lower (*1)

Other radionuclides (nuclides that do not emit α rays)

: 4×10^{-2} (Bq/cm^3) or lower (*2)

(Represented by a value relative to total β (γ))

^{60}Co : 2×10^{-2} (Bq/cm^3) or lower (*2)

^{89}Sr : 2.2×10^{-3} (Bq/cm^3) or lower (*1)

^{90}Sr : 1.1×10^{-3} (Bq/cm^3) or lower (*1)

^{90}Sr-^{90}Y : 7×10^{-4} (Bq/cm^3) or lower (*2)

^{95}Zr-^{95}Nb : 4.3×10^{-3} (Bq/cm^3) or lower (*1)

^{103}Ru : 1.1×10^{-3} (Bq/cm^3) or lower (*1)

^{106}Ru-^{106}Rh : 3.2×10^{-2} (Bq/cm^3) or lower (*1)

: 2×10^{-2} (Bq/cm^3) or lower (*2)

^{134}Cs : 1.1×10^{-3} (Bq/cm^3) or lower (*1)

: 2×10^{-2} (Bq/cm^3) or lower (*2)

^{137}Cs : 1.8×10^{-3} (Bq/cm^3) or lower (*1)

^{137}Cs-^{137m}Ba : 2×10^{-2} (Bq/cm^3) or lower (*2)

^{141}Ce : 2.2×10^{-3} (Bq/cm^3) or lower (*1)

^{144}Ce-^{144}Pr : 2.2×10^{-2} (Bq/cm^3) or lower (*1)

^{144}Ce-^{144m}Pr,^{144}Pr

: 2×10^{-2} (Bq/cm^3) or lower (*2)

^{154}Eu : 2×10^{-2} (Bq/cm^3) or lower (*2)

^{241}Pu : 3×10^{-2} (Bq/cm^3) or lower (*2)

*3 Since active tests were introduced in March 31, 2006, these radionuclides were added as items to be measured.