(4) Reprocessing Facilities (Radioactive Liquid Waste)

Japan Atomic Energy Agency, Reprocessing Facility	Item	Tritium [^{3}H] (Bq)	Iodine [^{129}I] (Bq)	Iodine [^{131}I] (Bq)
	Annual Release	4.9E+11	8.8E+05	N.D.
	Annual Release Control Target	1.9E+15	2.7E+10	1.2E+11
Japan Nuclear Fuel Ltd., Reprocessing Plant (Reprocessing Facility)	Item	Tritium [^{3}H] (Bq)	Iodine [^{129}I] (Bq)	Iodine [^{131}I] (Bq)
	Annual Release	5.8E+11	8.9E+06	N.D.
	Annual Release Control Target	1.8E+16	4.3E+10	1.7E+11

Japan Atomic Energy Agency, Reprocessing Facility	Item		Strontium [^{89}Sr] (Bq)	Strontium [^{90}Sr] (Bq)
	Annual release		N.D.	N.D.
	Annual Release Control Target		1.6E+10	3.2E+10
Japan Nuclear Fuel Ltd., Reprocessing Plant (Reprocessing Facility)	Item	Other Radionuclides [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	–		

Japan Atomic Energy Agency, Reprocessing Facility	Item	Cerium - Praseodymium [^{144}Ce-^{144}Pr] (Bq)		
	Annual Release	N.D.		
	Annual Release Control Target	1.2E+11		
Japan Nuclear Fuel Ltd., Reprocessing Plant (Reprocessing Facility)	Item	Other Radionuclides [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	–		

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

Total Alpha Radioactivity (Bq)	Plutonium [Pu(α)] (Bq)			Total Beta Radioactivity [excluding ^{3}H] (Bq)
N.D.	8.1E+04			N.D.
4.1E+09	2.3E+09			9.6E+11
	Left Column Breakdown [by nuclide]			
Other Radionuclides (nuclides that emit alpha rays) (Bq)	Plutonium [Pu(α)] (Bq)	Americium [Am(α)] (Bq)	Curium [Cm(α)] (Bq)	Other Radionuclides [nuclides that do not emit alpha rays] (Bq)
N.D.	N.D.	N.D.	N.D.	N.D.
3.8E+09	-			2.1E+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.
4.1E+10	6.4E+10	5.1E+11	6.0E+10	5.5E+10	5.9E+09
Other Radionuclides (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-^{137m}Ba] (Bq)	
		N.D.	N.D.	N.D.	
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Note: The radioactivity (Bq) of released liquid waste was obtained by multiplying the concentration of radioactive material (Bq/cm^3) in the released liquids by the amount of released liquids. "-" indicates that no annual release control target has been specified. N.D. is used to indicate values lower than the detection limit concentration.

Detection limit concentrations (Bq/cm^3) are as follows.

Japan Atomic Energy Agency, Reprocessing Facility

^{129}I	: 1.4E-03 or less
^{131}I	: 1.8E-03 or less
Total alpha radioactivity	: 1.1E-03 or less
Pu(α)	: 3.7E-05 or less
Total beta radioactivity (excluding ^{3}H)	: 2.2E-02 or less
^{89}Sr	: 2.2E-03 or less
^{90}Sr	: 1.1E-03 or less
^{95}Zr-^{95}Nb	: 4.3E-03 or less
^{103}Ru	: 1.1E-03 or less
^{106}Ru-^{106}Rh	: 3.2E-02 or less
^{134}Cs	: 1.1E-03 or less
^{137}Cs	: 1.8E-03 or less
^{141}Ce	: 2.2E-03 or less
^{144}Ce-^{144}Pr	: 2.2E-02 or less

Japan Nuclear Fuel Ltd., Reprocessing Plant (Reprocessing facility)

^{131}I	: 2E-02 or less
Other radionuclides (nuclides that emit alpha rays) (represented by the value for total alpha)	: 4E-03 or less
Pu(α)	: 1E-03 or less
Am(α)	: 6E-05 or less
Cm(α)	: 6E-05 or less
Other radionuclides (nuclides that do not emit alpha rays) (represented by the value for total beta (gamma))	: 4E-02 or less
^{60}Co	: 2E-02 or less
^{90}Sr-^{90}Y	: 7E-04 or less
^{106}Ru-^{106}Rh	: 2E-02 or less
^{134}Cs	: 2E-02 or less
^{137}Cs-^{137m}Ba	: 2E-02 or less
^{144}Ce-^{144m}Pr, ^{144}Pr	: 2E-02 or less
^{154}Eu	: 2E-02 or less
^{241}Pu	: 3E-02 or less