## (4) Reprocessing Facilities (Radioactive Gaseous Waste)

Japan Atomic Energy Agency, Nuclear Fuel Cycle Engineering Laboratories, Reprocessing Facility			Krypton [ <sup>85</sup> Kr] (Bq)	Iodine [ <sup>129</sup> I ] (Bq)	
	Reprocessing Facilities Total		N.D.	N.D.	*16
	Annual Release Control Target		8.9E+16	1.7E+09	
Japan Nuclear Fuel Ltd., Reprocessing Plant		Radioactive Argon (Bq)	Krypton [ <sup>85</sup> Kr] (Bq)	Iodine [ <sup>129</sup> I ] (Bq)	
(Reprocessing Facility)	Reprocessing Facilities Total	N.D.	N.D.	N.D.	
	Annual Release Control Target	_	3.3E+17	1.1E+10	

		Total Radioactive Particulate Matter		
Japan Atomic Energy Agency, Reprocessing Facility		Total Alpha (Bq)		Total Beta Gamma (Bq)
	Reprocessing Facilities Total	N.D.		N.D.
	Annual Release Control Target	*15 2.2E-08		*15 1.1E-04
Japan Nuclear Fuel Ltd., Reprocessing Plant (Reprocessing Facility)		Other Radionuclides	Left Column Breakdown (by nuclide)	Other Radionuclides
		[nuclides that emit alpha rays]	Plutonium [Pu(α)]	[nuclides that do not emit alpha rays]
		(Bq)	(Bq)	(Bq)
	Reprocessing Facilities Total	N.D.	N.D.	N.D.
	Annual Release Control Target	3.3E+08	_	9.4E+10

Note: The radioactivity (Bq) of released gaseous waste was obtained by multiplying the concentration of radioactive material (Bq/cm) in the released gases by the amount of released gases.

N.D. is used to indicate values lower than the detection limit concentration. "-" indicates that no annual release control target has been specified. Detection limit concentrations (Bq/cm³) are as follows.

Japan Atomic Energy Agency, Reprocessing I	Facility	Japan Nuclear Fuel Ltd., Reprocessing Plant (	Reprocessing facility)
<sup>14</sup> C	: 4.0E-05 or less	Radioactive Argon	: 1E-04 or less
$^{129}I$	: 3.7E-08 or less	<sup>85</sup> Kr	: 2E-02 or less
Total radioactive particulate matter (total alpha)	: 1.5E-10 or less	$^{129}{ m I}$	: 4E-08 or less
<sup>85</sup> Kr	: 2.4E-03 or less	$^{131}I$	: 7E-09 or less
$^{131}I$	: 3.7E-08 or less	Other radionuclides (nuclides that emit alpha rays)	: 4E-10 or less
Total radioactive particulate matter (total beta gamma)	: 1.5E-09 or less	(represented by the value	e for total alpha)
		$Pu(\alpha)$	: 4E-10 or less
		Other radionuclides (nuclides that do not emit alpha rays)	: 4E-09 or less
		(represented by the value for to	tal beta (gamma)
		<sup>106</sup> Ru- <sup>106</sup> Rh	: 4E-09 or less
		(Values for particulate 106Ru and volatile 106F	are indicated.)
		<sup>137</sup> Cs- <sup>137</sup> mBa	: 4E-09 or less
		<sup>90</sup> Sr- <sup>90</sup> Y	: 4E-10 or less
		<sup>14</sup> C	: 4E-05 or less

<sup>\*16:</sup> Hereafter, "Japan Atomic Energy Agency, Reprocessing Facility"

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

Iodine [131] (Bq)	Tritium [ <sup>3</sup> H ] (Bq)	Carbon [ <sup>14</sup> C ] (Bq)
N.D.	3.3E+11	N.D.
1.6E+10	5.6E+14	5.1E+12
Iodine [131 I] (Bq)	Tritium [ <sup>3</sup> H] (Bq)	Carbon [ <sup>14</sup> C ] (Bq)
N.D.	1.0E+11	N.D.
1.7E+10	1.9E+15	5.2E+13

Left Co	olumn Breakdown (by	nuclide)
Strontium	Ruthenium	Cesium
—Yttrium	—Rhodium	-Barium
[ <sup>90</sup> Sr- <sup>90</sup> Y]	[ <sup>106</sup> Ru- <sup>106</sup> Rh]	[ <sup>137</sup> Cs- <sup>137</sup> mBa]
(Bq)	(Bq)	(Bq)
N.D.	N.D.	N.D.
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