

**Table 3 Status of Radioactive Gaseous Waste Release Management in FY2013
(Nuclear Fuel Material Use Facilities)**

[Unit: Bq]

Site Name	Facility (Measurement Location)	Item	Annual Release Control Target	Annual Release #2		
Japan Atomic Energy Agency	Tokai Research and Development Center, Nuclear Science Research Institute	JRR-3 *1	Radioactive noble gases	#1	N.D. (N.D.)	
			Iodine 131	#1	N.D. (N.D.)	
			Dust	#1	N.D. (N.D.)	
			Tritium	#1	N.D. (6.1 x 10E9)	
		JRR-4 *1	Radioactive noble gases	#1	N.D. (N.D.)	
			Iodine 131	#1	N.D. (N.D.)	
			Dust	#1	N.D. (N.D.)	
		NSRR *1	Radioactive noble gases	#1	N.D. (N.D.)	
			Iodine 131	#1	N.D. (N.D.)	
			Dust	#1	N.D. (N.D.)	
		FCA *1	Iodine 131	#1	N.D. (N.D.)	
			Dust	#1	N.D. (N.D.)	
		Laboratory building No. 1 for the plutonium research program	Dust	#1	N.D. (N.D.)	
		Hot laboratory	Radioactive noble gases	#1	N.D. (N.D.)	
			Dust	#1	N.D. (N.D.)	
		Reactor Fuel Examination Facility (RFEF)	Radioactive noble gases	#1	2.6 x 10E10 (3.7 x 10E10)	
			Iodine 131	#1	N.D. (N.D.)	
			Dust	#1	N.D. (N.D.)	
		Waste Safety Testing Facility (WASTEF)	Dust	#1	N.D. (N.D.)	
		Back-End Fuel Cycle Key Elements Research Facility (BECKY) *1	Radioactive noble gases	#1	N.D. (N.D.)	
			Iodine 131	#1	N.D. (N.D.)	
			Dust	#1	N.D. (N.D.)	
		Waste Treatment Facilities *1	Waste Treatment Facility No. 1	Dust	#1	N.D. (N.D.)
				Tritium	#1	N.D. (N.D.)
			Waste Treatment Facility No. 2	Dust	#1	N.D. (N.D.)
			Waste Treatment Facility No. 3	Dust	#1	N.D. (N.D.)
			Waste Size Reduction and Storage Facility (WSRSF)	Dust	#1	N.D. (N.D.)
			Liquid Waste Treatment Facility	Dust	#1	N.D. (N.D.)
			Waste Volume Reduction Facility (WVRF)	Dust	#1	N.D. (N.D.)
		Tritium		#1	N.D. (N.D.)	
Tokai Research and Development Center, Nuclear Fuel Cycle Engineering Laboratories	Chemical Processing Facility (CPF)	Radioactive noble gases	#1	N.D. (N.D.)		
		Dust, total alpha	#1	N.D. (N.D.)		
		Dust, total beta	#1	3.7 x 10E4*3 (N.D.)		
		Tritium	#1	N.D. (N.D.)		
		Iodine 131	#1	N.D. (N.D.)		
		Iodine 129	#1	N.D. (N.D.)		
	Plutonium Handling Facility (Plutonium Fuel First Development Section, etc.)	Dust, total alpha	#1	N.D. (N.D.)		
	Uranium Handling Facility (Uranium Waste Storage Facility, etc.)	Dust, total alpha	#1	N.D. (N.D.)		

Facility	Facility (Measurement Location)	Item	Annual Release Control Target	Annual Release #2	
Japan Atomic Energy Agency	Oarai Research and Development Center (North Area)	JMTR *1	Radioactive noble gases	#1	N.D. (N.D.)
			Iodine 131	#1	N.D. (N.D.)
			Dust	#1	N.D. (N.D.)
			Tritium	#1	N.D. (N.D.)
		HTTR *1	Radioactive noble gases	#1	N.D. (N.D.)
			Iodine 131	#1	N.D. (N.D.)
			Dust	#1	N.D. (N.D.)
			Tritium	#1	N.D. (N.D.)
		Hot Laboratory	Radioactive noble gases	#1	N.D. (N.D.)
			Iodine 131	#1	N.D. (N.D.)
			Dust	#1	N.D. (N.D.)
			Tritium	#1	N.D. (N.D.)
	Plutonium Fuel Research Facility (PFRF)	Dust	#1	N.D. (N.D.)	
	Oarai Research and Development Center (South Area)	Alpha-Gamma Facility (AGF)	Radioactive materials (Mainly noble gases)	3.06 x 10E12	2.9 x 10E7
			Iodine 131	5.20 x 10E7	N.D.
		Materials Monitoring Facility (MMF)	Radioactive materials (Mainly noble gases)	3.03 x 10E10	N.D.
			Iodine 131	5.79 x 10E6	N.D.
		MMF-2	Radioactive materials (Mainly noble gases)	3.03 x 10E12	N.D.
			Iodine 131	5.78 x 10E7	N.D.
		Fuels Monitoring Facility (FMF)	Radioactive materials (Mainly noble gases)	2.04 x 10E13	N.D.
			Iodine 131	6.92 x 10E7	N.D.
		Waste Dismantling Facility (WDF)	Dust, total alpha	#1	N.D. (N.D.)
			Dust, total beta	#1	N.D. (N.D.)
Waste Processing Building *1		Dust, total beta	#1	N.D. (N.D.)	
Irradiation Equipment Assembling Inspection Facility	Dust, total beta	#1	N.D. (N.D.)		
Ningyo-toge Environmental Engineering Center	Uranium 238	#1	N.D. (N.D.)		
Kyoto University, Research Reactor Institute *1	KUR	Radioactive noble gases	4.0 x 10E13	1.0 x 10E11	
	KUCA	Radioactive noble gases	#1	N.D. (N.D.)	
National Institute of Radiological Sciences	Total alpha	#1	N.D. (N.D.)		
	Total beta	#1	N.D. (N.D.)		
Nuclear Material Control Center	Tokai Safeguard Center *2	Development & Testing Building	Total alpha	7.4 x 10E5	
		New Analysis Building	Total alpha	4.7 x 10E5	
	Rokkasho Safeguard Center	Total alpha	#1	N.D.(1.4 x 10E1)	
		Total beta	#1	N.D.(9.8 x 10E1)	
Nuclear Fuel Industries, Ltd., Tokai Works		Uranium	9.2 x 10E4	3.8 x 10E4	
Nippon Nuclear Fuel Development Co., Ltd.		Radioactive noble gases	3.3 x 10E12	5.2 x 10E10	
		Radioactive iodine (Iodine 131 equivalent)	7.4 x 10E8	0	
Nuclear Development Corporation		Radioactive noble gases (Kr-85, etc.)	3.0 x 10E12	1.2 x 10E10	
		Iodine 131	2.7 x 10E7	N.D.	

*1: For the Nuclear Science Research Institute, Tokai Research and Development Center, Japan Atomic Energy Agency(JAEA), the JAEA Oarai Research and Development Center (North Area), the JAEA Oarai Research and Development Center (South Area), and the Research Reactor Institute, Kyoto University, radioactive gaseous waste from reactor facilities for test and research, etc. is included.

*2: There was no annual release at the Nuclear Material Control Center's Tokai Safeguard Center in FY2012 because equipment at the Development and Testing Building was dismantled and removed.

*3: Due to the effects of release of radioactive materials caused by the accident at TEPCO's Fukushima Daiichi NPS.

(Note) This table has been prepared as follows.

- (1) #1: Nuclear fuel material use facility for which no annual release control target has been stipulated.
- (2) #2: Values in parentheses () indicate actual values from the previous fiscal year.
- (3) N.D.: Not Detected—values under the detection limit

(Table expression example) "x 10E-3" indicates "x 10⁻³."

**Table 4 Status of Radioactive Liquid Waste Release Management in FY2013
(Nuclear Fuel Material Use Facilities)**

[Unit: Bq]

Facility		Item	Annual Release Control Target	Annual Release #2
Japan Atomic Energy Agency	Tokai Research and Development Center, Nuclear Science Research Institute *1	Other than tritium and carbon 14	1.8 × 10E10	9.1 × 10E7*6 (1.1 × 10E8)
		Cobalt 60	3.7 × 10E9	2.7 × 10E5 (7.6 × 10E6)
		Cesium 137	3.7 × 10E9	1.5 × 10E7*6 (7.3 × 10E6)
		Tritium	2.5 × 10E13	2.7 × 10E11 (2.2 × 10E11)
	Tokai Research and Development Center, Nuclear Fuel Cycle Engineering Laboratories	Other than tritium	2.1 × 10E9	1.9 × 10E5
		Tritium	1.9 × 10E9	N.D.
		Plutonium	2.7 × 10E8	N.D.
		Uranium	2.7 × 10E8	N.D.
	Oarai Research and Development Center (North Area) *2	Other than tritium	2.2 × 10E9	N.D.
		Cobalt 60	2.2 × 10E8	N.D.
		Cesium 137	1.8 × 10E9	N.D.
		Tritium	3.7 × 10E12	6.5 × 10E9
	Oarai Research and Development Center (South Area) *3	All nuclides	3.7 × 10E8	N.D.
Ningyo-toge Environmental Engineering Center	Uranium 238	#1	N.D. (N.D.)	
National Institute of Radiological Sciences	Total alpha, total beta	#1	N.D. (N.D.)	
Nuclear Material Control Center	Tokai Safeguard Center	Total alpha	3.0 × 10E6	N.D.
	Rokkasho Safeguard Center	Total alpha	#1	N.D. (N.D.)
		Total beta	#1	N.D. (N.D.)
Nuclear Fuel Industries, Ltd., Tokai Works *4	Uranium	8.5 × 10E7	1.4 × 10E6	
Nippon Nuclear Fuel Development Co., Ltd. *3	Cobalt 60 Cesium 137	#1	7.53 × 10E5 (4.18 × 10E5)	
Nuclear Development Corporation *5	Cobalt 60	3.4 × 10E6	2.3 × 10E4	
	Cesium 137		9.4 × 10E4	

- *1: For the Nuclear Science Research Institute, Tokai Research and Development Center, Japan Atomic Energy Agency(JAEA), when the nuclear fuel material use facility is used in common with other facilities, released amounts for all common facilities are included.
- *2: For the JAEA Oarai Research and Development Center (North Area), released amounts of facilities other than the nuclear fuel material use facility (amounts released through the radioactive waste storage facility) are included.
- *3: The liquid radioactive waste from the JAEA Oarai Research and Development Center (South Area) and Nippon Nuclear Fuel Development Co., Ltd. are not included in this table because such waste is transferred to the radioactive waste storage facility of the JAEA Oarai Research and Development Center.
- *4: The annual release amount for Tokai Works, Nuclear Fuel Industries, Ltd. is a combined amount including the amount from the fuel manufacturing facility, since the facility is also categorized as a fuel manufacturing facility.
- *5: The released amount for the Nuclear Development Corporation includes the release amounts from facilities other than the nuclear fuel material use facility (radioisotope facilities are not subject to Article 41 of the Cabinet Order for the Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material, and Nuclear Reactors).
- *6: Due to the effects of release of radioactive materials caused by the accident at TEPCO's Fukushima Daiichi NPS.

(Note) This table has been prepared as follows.

- (1) #1: Nuclear fuel material use facility for which no annual release control target has been stipulated.
- (2) #2: Values in parentheses () indicate actual values from the previous fiscal year.
- (3) N.D.: Not Detected—values under the detection limit

(Table expression example) "x 10E-3" indicates "x 10⁻³."