

## (2) Nuclear Power Reactor Facilities in the Research and Development Stage

Facility	Categories of Radiation Workers	Number of Radiation Workers (persons)					
		5mSv or less	Greater than 5 mSv and no more than 10 mSv	Greater than 10 mSv and no more than 15 mSv	Greater than 15 mSv and no more than 20 mSv	Greater than 20 mSv and no more than 25 mSv	Greater than 25 mSv and no more than 30 mSv
Japan Atomic Energy Agency, Tsuruga Head Office, Fugen Decommissioning Engineering	Employee	116	0	0	0	0	0
	Others	402	5	0	0	0	0
	Total	518	5	0	0	0	0
Japan Atomic Energy Agency, Tsuruga Head Office, Fast Breeder Reactor Research and Development Center	Employee	368	0	0	0	0	0
	Others	869	0	0	0	0	0
	Total	1,237	0	0	0	0	0
Grand Total	Employee	484	0	0	0	0	0
	Others	1,271	5	0	0	0	0
	Total	1,755	5	0	0	0	0

## (3) Fuel Manufacturing Facilities

Facility	Categories of Radiation Workers	Number of Radiation Workers (persons)					
		5mSv or less	Greater than 5 mSv and no more than 10 mSv	Greater than 10 mSv and no more than 15 mSv	Greater than 15 mSv and no more than 20 mSv	Greater than 20 mSv and no more than 25 mSv	Greater than 25 mSv and no more than 30 mSv
Global Nuclear Fuel-Japan Co., Ltd.	Employee	353	0	0	0	0	0
	Others	183	0	0	0	0	0
	Total	536	0	0	0	0	0
Mitsubishi Nuclear Fuel Co., Ltd.	Employee	430	0	0	0	0	0
	Others	101	0	0	0	0	0
	Total	531	0	0	0	0	0
Nuclear Fuel Industries, Ltd., Tokai Works	Employee	238	0	0	0	0	0
	Others	91	0	0	0	0	0
	Total	329	0	0	0	0	0
Nuclear Fuel Industries, Ltd., Kumatori Works	Employee	305	0	0	0	0	0
	Others	165	0	0	0	0	0
	Total	470	0	0	0	0	0
Japan Atomic Energy Agency, Uranium Enrichment Demonstration Plant	Employee	66	0	0	0	0	0
	Others	121	0	0	0	0	0
	Total	187	0	0	0	0	0
Japan Nuclear Fuel Ltd., Enrichment and Disposal Office (Uranium Enrichment Plant)	Employee	191	0	0	0	0	0
	Others	652	0	0	0	0	0
	Total	843	0	0	0	0	0
Grand Total	Employee	1,583	0	0	0	0	0
	Others	1,313	0	0	0	0	0
	Total	2,896	0	0	0	0	0

Number of Radiation Workers (persons)						Collective Dose (person-Sv)	Average Individual Dose (mSv)	Maximum Individual Dose (mSv)
Greater than 30 mSv and no more than 35 mSv	Greater than 35 mSv and no more than 40 mSv	Greater than 40 mSv and no more than 45 mSv	Greater than 45 mSv and no more than 50 mSv	Greater than 50 mSv	Total			
0	0	0	0	0	116	0.01	0.1	2.8
0	0	0	0	0	407	0.13	0.3	9.4
0	0	0	0	0	523	0.15	0.3	9.4
0	0	0	0	0	368	0.00	0.0	0.0
0	0	0	0	0	869	0.00	0.0	0.0
0	0	0	0	0	1,237	0.00	0.0	0.0
0	0	0	0	0	484	0.01	0.0	2.8
0	0	0	0	0	1,276	0.13	0.1	9.4
0	0	0	0	0	1,760	0.15	0.1	9.4

Number of Radiation Workers (persons)						Collective Dose (person-Sv)	Average Individual Dose (mSv)	Maximum Individual Dose (mSv)
Greater than 30 mSv and no more than 35 mSv	Greater than 35 mSv and no more than 40 mSv	Greater than 40 mSv and no more than 45 mSv	Greater than 45 mSv and no more than 50 mSv	Greater than 50 mSv	Total			
0	0	0	0	0	353	0.02	0.1	1.0
0	0	0	0	0	183	0.00	0.0	0.1
0	0	0	0	0	536	0.02	0.1	1.0
0	0	0	0	0	430	0.09	0.2	3.7
0	0	0	0	0	101	0.00	0.0	0.5
0	0	0	0	0	531	0.09	0.2	3.7
0	0	0	0	0	238	0.05	0.2	1.7
0	0	0	0	0	91	0.01	0.1	1.1
0	0	0	0	0	329	0.06	0.2	1.7
0	0	0	0	0	305	0.07	0.2	1.9
0	0	0	0	0	165	0.00	0.0	1.0
0	0	0	0	0	470	0.07	0.1	1.9
0	0	0	0	0	66	0.00	0.0	0.1
0	0	0	0	0	121	0.00	0.0	0.5
0	0	0	0	0	187	0.00	0.0	0.5
0	0	0	0	0	191	0.00	0.0	0.2
0	0	0	0	0	652	0.00	0.0	0.1
0	0	0	0	0	843	0.00	0.0	0.2
0	0	0	0	0	1,583	0.23	0.1	3.7
0	0	0	0	0	1,313	0.01	0.0	1.1
0	0	0	0	0	2,896	0.24	0.1	3.7

## (4) Reprocessing Facilities

Facility	Categories of Radiation Workers	Number of Radiation Workers (persons)					
		5mSv or less	Greater than 5 mSv and no more than 10 mSv	Greater than 10 mSv and no more than 15 mSv	Greater than 15 mSv and no more than 20 mSv	Greater than 20 mSv and no more than 25 mSv	Greater than 25 mSv and no more than 30 mSv
Japan Atomic Energy Agency, Tokai Research and Development Center, Nuclear Fuel Cycle Engineering Laboratories, Reprocessing Facility	Employee	405	0	0	0	0	0
	Others	828	0	0	0	0	0
	Total	1,233	0	0	0	0	0
Japan Nuclear Fuel Ltd., Reprocessing Plant(Reprocessing Facility)	Employee	1,274	0	0	0	0	0
	Others	4,118	1	0	0	0	0
	Total	5,392	1	0	0	0	0
Grand Total	Employee	1,679	0	0	0	0	0
	Others	4,946	1	0	0	0	0
	Total	6,625	1	0	0	0	0

## (5) Waste Burial Facilities and Waste Management Facilities

Facility	Categories of Radiation Workers	Number of Radiation Workers (persons)					
		5mSv or less	Greater than 5 mSv and no more than 10 mSv	Greater than 10 mSv and no more than 15 mSv	Greater than 15 mSv and no more than 20 mSv	Greater than 20 mSv and no more than 25 mSv	Greater than 25 mSv and no more than 30 mSv
Japan Nuclear Fuel Ltd., Enrichment and Disposal Office(Low-Level Radioactive Waste Disposal Center)	Employee	69	0	0	0	0	0
	Others	167	0	0	0	0	0
	Total	236	0	0	0	0	0
Japan Nuclear Fuel Ltd., Reprocessing Plant(Waste Storage Facility)	Employee	222	0	0	0	0	0
	Others	840	0	0	0	0	0
	Total	1,062	0	0	0	0	0
Japan Atomic Energy Agency, Tokai Research and Development Center, Nuclear Science Research Institute, Radioactive Waste Disposal Facility	Employee	/	/	/	/	/	/
	Others	/	/	/	/	/	/
	Total	/	/	/	/	/	/
Japan Atomic Energy Agency, Oarai Research and Development Center, Radioactive Waste Management Facility	Employee	32	0	0	0	0	0
	Others	138	0	0	0	0	0
	Total	170	0	0	0	0	0
Grand Total	Employee	323	0	0	0	0	0
	Others	1,145	0	0	0	0	0
	Total	1,468	0	0	0	0	0

Number of Radiation Workers (persons)						Collective Dose (person-Sv)	Average Individual Dose (mSv)	Maximum Individual Dose (mSv)
Greater than 30 mSv and no more than 35 mSv	Greater than 35 mSv and no more than 40 mSv	Greater than 40 mSv and no more than 45 mSv	Greater than 45 mSv and no more than 50 mSv	Greater than 50 mSv	Total			
0	0	0	0	0	405	0.02	0.0	2.1
0	0	0	0	0	828	0.04	0.0	2.5
0	0	0	0	0	1,233	0.06	0.0	2.5
0	0	0	0	0	1,274	0.01	0.0	0.5
0	0	0	0	0	4,119	0.18	0.0	5.4
0	0	0	0	0	5,393	0.19	0.0	5.4
0	0	0	0	0	1,679	0.03	0.0	2.1
0	0	0	0	0	4,947	0.22	0.0	5.4
0	0	0	0	0	6,626	0.25	0.0	5.4

Number of Radiation Workers (persons)						Collective Dose (person-Sv)	Average Individual Dose (mSv)	Maximum Individual Dose (mSv)
Greater than 30 mSv and no more than 35 mSv	Greater than 35 mSv and no more than 40 mSv	Greater than 40 mSv and no more than 45 mSv	Greater than 45 mSv and no more than 50 mSv	Greater than 50 mSv	Total			
0	0	0	0	0	69	0.00	0.0	0.1
0	0	0	0	0	167	0.00	0.0	0.0
0	0	0	0	0	236	0.00	0.0	0.1
0	0	0	0	0	222	0.00	0.0	0.0
0	0	0	0	0	840	0.00	0.0	0.0
0	0	0	0	0	1,062	0.00	0.0	0.0
0	0	0	0	0	32	0.00	0.0	0.2
0	0	0	0	0	138	0.00	0.0	0.2
0	0	0	0	0	170	0.00	0.0	0.2
0	0	0	0	0	323	0.00	0.0	0.2
0	0	0	0	0	1,145	0.00	0.0	0.2
0	0	0	0	0	1,468	0.00	0.0	0.2

Table 1 Dose Distribution for Radiation Workers in FY 2012  
(Nuclear Reactor Facilities for Test and Research, etc.) \*1

Name of Office		Division	Number of Radiation Workers(persons)						FY 2012			FY 2011		
			5mSv or less	Greater than 5mSv and no more than 15mSv	Greater than 15mSv and no more than 20mSv	Greater than 20mSv and no more than 25mSv	Greater than 25mSv and no more than 50mSv	Greater than 50mSv	Total Number of Radiation Workers (persons)	Collective Dose (person-mSv)	Average Individual Dose (mSv)	Total Number of Radiation Workers (persons)	Collective Dose (person-mSv)	Average Individual Dose (mSv)
Japan Atomic Energy Agency	Tokai Research and Development Center, Nuclear Science Research Institute *2	Employee Others Total	344 1,177 1,521	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	344 1,177 1,521	6 321 38	0.0 0.0 0.0	372 1,470 1,842	8 36 44	0.0 0.0 0.0
	Oarai Research and Development Center (North Area) *2	Employee Others Total	128 524 652	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	128 524 652	0 0 0	0.0 0.0 0.0	131 625 756	2 0 2	0.0 0.0 0.0
	Oarai Research and Development Center (South Area) *2	Employee Others Total	107 339 446	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	107 339 446	3 12 15	0.0 0.0 0.0	113 323 436	3 15 18	0.0 0.0 0.0
	Aomori Research and Development Center, Mutsu Office	Employee Others Total	19 41 60	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	19 41 60	0 0 0	0.0 0.0 0.0	18 42 60	0 0 0	0.0 0.0 0.0
The University of Tokyo, Graduate School of Engineering, Nuclear Professional School *3		Employee Others Total	53 - 53	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	53 - 53	1 - 1	0.0 - 0.0	53 - 53	0 - 0	0.0 - 0.0
Kyoto University, Research Reactor Institute *3		Employee Others Total	190 366 556	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	190 366 556	15 0 16	0.1 0.0 0.0	193 357 550	13 1 13	0.1 0.0 0.0
Rikkyo University, Institute for Atomic Energy		Employee Others Total	5 29 34	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	5 29 34	0 0 0	0.0 0.0 0.0	4 11 15	0 0 0	0.0 0.0 0.0
Tokyo City University, Atomic Energy Research Institute		Employee Others Total	12 - 12	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	12 - 12	0 - 0	0.0 - 0.0	15 30 45	0 0 0	0.0 0.0 0.0
Kinki University, Atomic Energy Research Institute *4		Employee Others Total	50 {32} 3 53 {32}	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	50 {32} 3 53 {32}	0 0 0	0.0 0.0 0.0	52 2 54	1 0 1	0.0 0.0 0.0
Toshiba Corporation	Research Reactor Center	Employee Others Total	17 33 50	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	17 33 50	0 0 0	0.0 0.0 0.0	15 39 54	0 0 0	0.0 0.0 0.0
	Nuclear Engineering Laboratory *3	Employee Others Total	21 38 59	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	21 38 59	1 0 1	0.0 0.0 0.0	23 44 67	2 0 2	0.1 0.0 0.0
Hitachi, Ltd., Power & Industrial Systems, Nuclear System Division, Ozenji Hitachi Training Reactor Center		Employee Others Total	5 - 5	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 5	0 - 0	0.0 - 0.0	4 5 9	0 0 0	0.0 0.0 0.0
Subtotal		Employee Others Total	951 2,550 3,501	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	951 2,550 3,501	26 44 70	0.0 0.0 0.0	993 2,948 3,941	28 52 80	0.0 0.0 0.0

\*1: "-" mark in the "Number of Radiation Workers" column shows that there is no radiation worker.

\*2: Radiation workers at the both north and south areas of Oarai Research & Development Center and Nuclear Science Research Institute, Japan Atomic Energy Agency coming under the radiation worker of both reactor facility and nuclear fuel using facility are counted as the radiation workers of reactor facility.

\*3: Radiation workers at the Nuclear Professional School, Graduate School of Engineering, the University of Tokyo, the Research Reactor Institute, Kyoto University, and the Nuclear Engineering Laboratory, Toshiba Corporation of coming under radiation workers at both reactor facility and nuclear fuel using facility are counted as both of the radiation worker of reactor facility and nuclear fuel using facility. (Double counting)

\*4: Number in the parenthesis { } of the Atomic Energy Research Institute, Kinki University is the inner number of students of the Department of Science and Engineering, Kinki University, who use the reactor facility for their graduation study.

(Note) This table should be read as follows;

(The same for Tables 2-4)

(1) "Employee" means staffs of the place of business concerned, etc., and "Others" means persons of contractors, etc.

(2) "Collective dose" was counted rounding off the 1st figure below decimal point. "0" means less than 0.5 person-mSv.

(3) "Average Individual dose" was counted rounding off the 2nd figure below decimal point. "0.0" means less than 0.05 person-mSv.

Table 3 Dose Distribution for Radiation Workers in FY 2012  
(Nuclear Fuel Material Using Facilities) \*1

Name of Office		Division	Number of Radiation Workers(persons)						FY 2012			FY 2011		
			5mSv or less	Greater than 5mSv and no more than 15mSv	Greater than 15mSv and no more than 20mSv	Greater than 20mSv and no more than 25mSv	Greater than 25mSv and no more than 50mSv	Greater than 50mSv	Total Number of Radiation Workers (persons)	Collective Dose (person-mSv)	Average Individual Dose (mSv)	Total Number of Radiation Workers (persons)	Collective Dose (person-mSv)	Average Individual Dose (mSv)
Japan Atomic Energy Agency	Tokai Research and Development Center, Nuclear Science Research Institute *2	Employee Others Total	141 392 533	0 1 1	0 0 0	0 0 0	0 0 0	0 0 0	141 393 534	10 46 56	0.1 0.1 0.1	139 283 422	12 36 48	0.1 0.1 0.1
	Tokai Research and Development Center, Nuclear Fuel Cycle Engineering Laboratory	Employee Others Total	393 1,089 1,482	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	393 1,089 1,482	12 203 215	0.0 0.2 0.1	427 1,224 1,651	19 279 298	0.0 0.2 0.2
	Oarai Research and Development Center (North Area) *2	Employee Others Total	81 256 337	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	81 256 337	5 0 5	0.1 0.0 0.0	92 253 345	0 0 0	0.0 0.0 0.0
	Oarai Research and Development Center (South Area) *2	Employee Others Total	74 270 344	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	74 270 344	8 9 17	0.1 0.0 0.0	73 285 358	3 5 8	0.0 0.0 0.0
	Ningyo-toge Environmental Engineering Center	Employee Others Total	84 209 293	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	84 209 293	0 2 2	0.0 0.0 0.0	84 207 291	0 3 3	0.0 0.0 0.0
	The University of Tokyo, Graduate School of Engineering, Nuclear Professional School *3	Employee Others Total	(53) (-) (53)	(0) (-) (0)	(0) (-) (0)	(0) (-) (0)	(0) (-) (0)	(0) (-) (0)	(53) (-) (53)	(1) (-) (1)	(0.0) (-) (0.0)	(53) (-) (53)	(0) (-) (0)	(0.0) (-) (0.0)
	Kyoto University, Research Reactor Institute *4	Employee Others Total	(23) (-) (23)	(0) (-) (0)	(0) (-) (0)	(0) (-) (0)	(0) (-) (0)	(0) (-) (0)	(23) (-) (23)	2 (-) 2	(0.1) (-) (0.1)	(24) (-) (24)	2 (-) 2	(0.1) (-) (0.1)
	National Institute of Radiological Sciences	Employee Others Total	112 152 264	0 0 0	0 0 4	0 0 0	0 0 0	0 0 0	112 152 264	2 2 3	0.0 0.0 0.0	114 148 262	1 3 4	0.0 0.0 0.0
	National Institute of Advanced Industrial Science and Technology, Tsukuba Central 2	Employee Others Total	14 - 14	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	14 - 14	0 - 0	0.0 - 0.0	13 0 13	0 0 0	0.0 0.0 0.0
	Material Control	Tokai Safeguard Center	Employee Others Total	59 87 146	0 0 0	0 0 0	0 0 0	0 0 0	59 87 146	7 0 7	0.1 0.0 0.1	65 65 130	7 0 8	0.1 0.0 0.1
Rokkasho Safeguard Center		Employee Others Total	48 164 212	0 0 0	0 0 0	0 0 0	0 0 0	48 164 212	0 0 0	0.0 0.0 0.0	38 178 216	0 0 0	0.0 0.0 0.0	
Nuclear Fuel Industries, Ltd., Tokai Works *5	Employee Others Total	238 91 329	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	238 91 329	53 7 59	0.2 0.1 0.2	244 123 367	64 5 69	0.3 0.0 0.2	
Nippon Nuclear Fuel Development Co., Ltd.	Employee Others Total	56 142 198	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	56 142 198	28 60 87	0.5 0.4 0.4	57 176 233	29 71 100	0.5 0.4 0.4	
Nuclear Development Corporation	Employee Others Total	51 85 136	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	51 85 136	16 30 46	0.3 0.4 0.3	50 103 153	18 34 51	0.4 0.3 0.3	
Toshiba Corporation, Nuclear Engineering Laboratory	Employee Others Total	14 33 47	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	14 33 47	0 0 0	0.0 0.0 0.0	13 39 52	0 0 0	0.0 0.0 0.0	
Subtotal		Employee Others Total	1,365 2,970 4,335	0 1 1	0 0 0	0 0 0	0 0 0	1,365 2,971 4,336	140 358 498	0.1 0.1 0.1	1,409 3,084 4,493	152 436 588	0.1 0.1 0.1	

\*1: "-" mark in the "Number of Radiation Workers" column shows that there is no radiation worker.

\*2: Radiation workers at the both north and south areas of Oarai Research & Development Center and Nuclear Science Research Institute, Japan Atomic Energy Agency, who are engaged in the facilities collectively regulated as reactor facilities coming under the Article 41 of the Cabinet Order for the Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors, are excluded.

\*3: All radiation workers at the Nuclear Professional School, Graduate School of Engineering, the University of Tokyo are deducted from the subtotal since they are persons engaged in radiation work at the both reactor and nuclear fuel using facilities.

\*4: All radiation workers at the nuclear fuel using facility of the Research Reactor Institute, Kyoto University are deducted from the subtotal since they are also personnel engaged in radiation work of the reactor facility.

\*5: All radiation workers at the Tokai Works, Nuclear Fuel Industries, Ltd. are personnel engaged in radiation work at the both nuclear fuel using facility and fuel manufacturing facility since the works come under also to fuel manufacturing facility.