

Japan Nuclear Fuel Limited, Reprocessing Facility (2nd quarter of FY 2007)

Measured object	Sampling		Measurement		Measured value ^{Note 1}			Comparative area	Remarks	Usual range of fluctuation ^{Note 1, Note 2}	
	Sampling point	Frequency	Object	Frequency	Object	Min to Max	Unit	Min to Max		Min to Max	
Seawater	Inside the port area of Mutsu-Ogawara Port Near the north boundary of the port area of Mutsu-Ogawara Port Near the south boundary of the port area of Mutsu-Ogawara Port	Once/3 months	³ H	Once/3 months	³ H	ND	Bq/L		Sampling date: July 24, 2007	ND	
			⁹⁰ Sr		⁹⁰ Sr	ND				ND - 3	
			γ nuclide		⁶⁰ Co	ND				ND	
					¹⁰⁶ Ru	ND				ND	
					¹³⁴ Cs	ND				ND	
					¹³⁷ Cs	ND				ND	
					¹⁴⁴ Ce	ND				ND	
					¹⁵⁴ Eu	ND				ND	
Pu(a) ^{Note 3}	Pu(a) ^{Note 3}	ND	ND								
Sea-bottom soil	Near discharge outlet: 1 point About 1 km east: 1 point About 1 km west: 1 point About 0.62mi south: 1 point About 0.62mi north: 1 point About 3 km south: 1 point About 3 km north: 1 point Monomizaki-Oki: 1 point	Once/6 months	⁹⁰ Sr	Once/6 months	⁹⁰ Sr	ND	Bq/kg dry		Reported in 1st quarter. - Will be reported in 3rd quarter.	ND	
			γ nuclide		⁶⁰ Co	ND				ND	
					¹³⁴ Cs	ND				ND	
					¹³⁷ Cs	ND				ND	
					¹⁴⁴ Ce	ND				ND	
					¹⁵⁴ Eu	ND				ND	
					Pu(a) ^{Note 3}	Pu(a) ^{Note 3}				ND	0.11 - 0.75
			²⁴¹ Am		²⁴¹ Am	ND				ND - 0.30	
²⁴⁴ Cm	²⁴⁴ Cm	ND	ND								
Marine product	Fish	Rokkasho Village Front sea area: 1 point	Once/3 months	Once/3 months	³ H	ND	Bq/L		Sampling date: August 24, 2007 Object: flounder	ND	
					¹⁰⁶ Ru	ND				ND	
					Pu(a) ^{Note 3}	Pu(a) ^{Note 3}				ND	ND
	Shellfish	Rokkasho Village Front sea area: 1 point	Once/3 months	Once/3 months	Once/3 months	¹⁰⁶ Ru	ND	Bq/kg raw		Sampling date: July 30, 2007 Object: common mussel	ND
						Pu(a) ^{Note 3}	Pu(a) ^{Note 3}				ND
	Seaweed	Rokkasho Village Front sea area: 1 point	Once/3 months	Once/3 months	Once/3 months	¹⁰⁶ Ru	ND	Bq/kg raw		Sampling date: August 7, 2007 Object: laminaria	ND
Fishing net	Rokkasho Village Front sea area: 1 point	Once/3 months	Surface dose rate	Once/3 months	γ radiation	ND	nGy/h		Installation period: from June 12 to September 13, 2007	ND	
			Absorbed dose rate		β radiation	ND	nGy/h			ND - 50	

Note 1) ND: indicates below the determination limit.

Note 2) The "Usual range of fluctuation" is the minimum to the maximum of the past measured values (from 3rd quarter of FY 1998 to FY 2006), excluding the fluctuation caused by normal operation of the reprocessing facility. Items measured for period

Note 3) Pu (a) : indicates the sum of ²³⁸Pu and ²³⁹⁺²⁴⁰Pu

Measured object	Sampling		Measurement		Measured value ^{Note 1}			Comparative area	Remarks	Usual range of fluctuation ^{Note 1, Note 2}		
	Sampling point	Frequency	Object	Frequency	Object	Min to Max	Unit	Min to Max		Min to Max		
Air radiation	Dose rate	Inside the site: 9 points	Continuously	γ radiation	Continuously	Monitoring post	13 - 40 ^{Note 3}	nGy/h		7 - 81 ^{Note 3}		
		Outside the site: 3 points				Monitoring station	19 - 51 ^{Note 3}			7 - 93 ^{Note 3}		
	Cumulative dose	Inside the site: 1 point	Continuously	γ radiation	Once/week	γ radiation	8.7 - 10.5	μSv/7 days		- Installation period: from July 2 to October 1, 2007	6.2 - 12.9	
		Inside the site: 9 points, Outside the site: 14 points					Once/3 months			γ radiation	87 - 108	μGy/91 days
Air	Air-borne dust	Inside the site: 9 points	Continuously	Total α radioactivity	Continuously	Total α radioactivity	7.0 ^{Note 3}	Bq/m ³		- The maximum value in the quarter	16 ^{Note 3}	
				Total β radioactivity		Total β radioactivity	4.8 ^{Note 3}			8.7 ^{Note 3}		
		Outside the site: 3 points		Once/week		Total α radioactivity	* - 0.18			* - 0.37		
			Total β radioactivity	Once/week	Total β radioactivity	* - 0.57	mBq/m ³		- Sampling period: from July 2 to October 1, 2007 * - Measured values with three times as large as the counting error or lower were regarded as below the detection limit and represented by "**".	* - 1.2		
		Inside the site: 9 points, Outside the site: 3 points	Continuously	¹⁰⁶ Ru	Once/3 months	¹⁰⁶ Ru	ND	mBq/m ³		- Sampling period: inside the site: from July 1 to October 1, 2007 outside the site: from July 2 to October 1, 2007	ND	
		Pu(a) ^{Note 4}		Pu(a) ^{Note 4}		ND	ND					
		Gaseous beta radioactivity concentration	Outside the site: 3 points	Continuously	⁸⁵ Kr	Continuously	⁸⁵ Kr	ND - 4 ^{Note 3, Note 5}	kBq/m ³		ND ^{Note 3}	
	Iodine	Outside the site: 3 points	Continuously	¹³¹ I	Once/week	¹³¹ I	ND	mBq/m ³	- Sampling period: from July 2 to October 1, 2007	ND		
	Moisture in air	Outside the site: 3 points	Continuously	³ H	Once/month	³ H	ND	mBq/m ³	- Sampling period: from June 29 to September 28, 2007	ND		
	Drinking water	Outside the site: 4 points	Once/3 months	³ H	Once/3 months	³ H	ND	Bq/L			ND	
⁹⁰ Sr				⁹⁰ Sr		ND	ND					
¹⁰⁶ Ru				¹⁰⁶ Ru		ND	ND					
¹³⁷ Cs				¹³⁷ Cs		ND	ND					
Pu(a) ^{Note 4}				Pu(a) ^{Note 4}		ND	ND					
Land soil	Surface soil	Inside the site: 1 point, Outside the site: 3 points	Once/year	⁹⁰ Sr	Once/year	⁹⁰ Sr	1.5 - 5.4	Bq/kg dry			4.6	
				¹⁰⁶ Ru		¹⁰⁶ Ru	ND				ND	
				¹³⁷ Cs		¹³⁷ Cs	ND				ND	
				¹³⁷ Cs		¹³⁷ Cs	8 - 24				7	
				Pu(a) ^{Note 4}		Pu(a) ^{Note 4}	0.29 - 0.82				0.26	
				²⁴¹ Am		²⁴¹ Am	0.10 - 0.25				0.10	
				²⁴⁴ Cm		²⁴⁴ Cm	ND				ND	
	Lake-bottom soil	Outside the site: 1 point	Once/year	Once/year	⁹⁰ Sr	Once/year	⁹⁰ Sr		Bq/kg dry			ND - 0.5
					¹³⁷ Cs		¹³⁷ Cs					5 - 11
					Pu(a) ^{Note 4}		Pu(a) ^{Note 4}					0.97 - 1.3
				²⁴¹ Am			0.34 - 0.42					
				²⁴⁴ Cm			ND					
Land plant	Polished rice	Outside the site: 3 points	Once/year	¹⁴ C	Once/year	¹⁴ C		Bq/g · carbon			0.23 - 0.25	
				¹⁰⁶ Ru		¹⁰⁶ Ru					ND	
					Pu(a) ^{Note 4}	Pu(a) ^{Note 4}		Bq/kg raw			ND	
	Root vegetable	Outside the site: 2 points	Once/year	¹⁰⁶ Ru	Once/year	¹⁰⁶ Ru	ND	Bq/kg raw			ND	
				Pu(a) ^{Note 4}		Pu(a) ^{Note 4}	ND				- Sampling date: August 16, 2007 Object: potato - Will be reported in 3rd quarter. Object: sweet potato	ND
	Leaf vegetable	Outside the site: 1 point	Once/year	¹⁰⁶ Ru	Once/year	¹⁰⁶ Ru		Bq/kg raw			ND	
				Pu(a) ^{Note 4}		Pu(a) ^{Note 4}					- Will be reported in 3rd quarter. Object: Chinese cabbage	ND
Farm product	Milk	Outside the site: 4 points	Once/3 months	¹⁰⁶ Ru	Once/3 months	¹⁰⁶ Ru	ND	Bq/L	- Sampling date: July 3, 2007	ND		

Note 1) ND: indicates below the determination limit.

Note 2) The "Usual range of fluctuation" is the minimum to the maximum of the past measured values (from 3rd quarter of FY 1998 to FY 2006), excluding the fluctuation caused by normal operation of the reprocessing facility.
Items measured for period

Note 3) Indicates 1 hour average values.

Note 4) Pu (α): indicates the sum of ²³⁹Pu and ²⁴⁰Pu.

Note 5) Measured values at the monitoring stations were as follows:

At the Oippekawa monitoring station, 1 hour average value from 6 to 7 on September 21 was 3 kBq/m³. All was ND at other periods.
At the Futamata monitoring station, 1 hour average