

Japan Nuclear Fuel Limited, Reprocessing Facility (1st quarter of FY 2007)

Measured object	Sampling		Measurement		Measured value <sup>Note 1</sup>			Comparative area	Remarks	Usual range of fluctuation <sup>Note 1, Note 2</sup>	
	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	<sup>3</sup> H	Once/3 months	<sup>3</sup> H	ND	mBq/L	/	- Sampling date: April 10, 2007	ND	
			<sup>90</sup> Sr		<sup>90</sup> Sr	ND - 2				ND - 3	
			γ nuclide		<sup>60</sup> Co	ND				ND	
					<sup>106</sup> Ru	ND				ND	
					<sup>134</sup> Cs	ND				ND	
					<sup>137</sup> Cs	ND				ND	
					<sup>144</sup> Ce	ND				ND	
					<sup>154</sup> Eu	ND				ND	
Pu(α) <sup>Note 3</sup>	Pu(α) <sup>Note 3</sup>	ND	ND								
Sea-bottom soil	Near discharge outlet: 1 point About 1 km east: 1 point About 1 km west: 1 point About 1 km north: 1 point About 1 km south: 1 point About 3 km north: 1 point About 3 km south: 1 point Monomizaki-Oki: 1 point	Once/6 months	γ nuclide	Once/6 months	<sup>90</sup> Sr	ND	Bq/kg dry	/	- Sampling date: April 10, 2007 - Will be reported in 3rd quarter.	ND	
					<sup>60</sup> Co	ND				ND	
					<sup>134</sup> Cs	ND				ND	
					<sup>137</sup> Cs	ND				ND	
					<sup>144</sup> Ce	ND				ND	
					<sup>154</sup> Eu	ND				ND	
					Pu(α) <sup>Note 3</sup>	Pu(α) <sup>Note 3</sup>				0.27 - 0.68	0.11 - 0.75
					<sup>241</sup> Am	<sup>241</sup> Am				0.12 - 0.29	ND - 0.30
<sup>244</sup> Cm	<sup>244</sup> Cm	ND	ND								
Marine product	Fish	Rokkasho Village Front sea area: 1 point	Once/3 months	Once/3 months	<sup>3</sup> H	ND	Bq/L	/	- Sampling date: May 21, 2007 Object: flounder	ND	
					<sup>106</sup> Ru	ND				ND	
					Pu(α) <sup>Note 3</sup>	Pu(α) <sup>Note 3</sup>				ND	ND
	Shellfish	Rokkasho Village Front sea area: 1 point	Once/3 months	Once/3 months	<sup>106</sup> Ru	ND	Bq/kg raw	/	- Sampling date: April 5, 2007 Object: sakhalin surf clam	ND	
					Pu(α) <sup>Note 3</sup>	Pu(α) <sup>Note 3</sup>				0.010	ND - 0.007
	Seaweed	Rokkasho Village Front sea area: 1 point	Once/3 months	Once/3 months	<sup>106</sup> Ru	ND	Bq/kg raw	/	- Sampling date: April 18, 2007 Object: Alaria crassifolia	ND	
					Pu(α) <sup>Note 3</sup>	Pu(α) <sup>Note 3</sup>				0.003	ND - 0.012
	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 March 23 to June 12, 2007	ND
				Absorbed dose rate		β radiation	ND				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 periods

Note 3) Pu(α): indicates the sum of <sup>238</sup>Pu and <sup>239-240</sup>Pu.

Measured object	Sampling		Measurement		Measured value <sup>Note 1</sup>			Comparative area	Remarks	Usual range of fluctuation <sup>Note 1, Note 2</sup>		
	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 - 38 <sup>Note 3</sup>	nGy/h			7 - 81 <sup>Note 3</sup>	
		Outside the site: 3 points				Monitoring station	19 - 49 <sup>Note 3</sup>				7 - 93 <sup>Note 3</sup>	
	Cumulative dose	Inside the site: 1 point	Continuously	γ radiation	Once/week	γ radiation	8.7 - 10.3	μSv/7 days	83	- Installation period: from April 2 to July 2, 2007	6.2 - 12.9	
		Inside the site: 9 points, Outside the site: 14 points					Once/3 months				γ radiation	83 - 110
Air	Air-borne dust	Inside the site: 9 points	Continuously	Total α radioactivity	Continuously	Total α radioactivity	6.3 <sup>Note 3</sup>	Bq/m <sup>3</sup>		- The maximum value in the quarter	16 <sup>Note 3</sup>	
				Total β radioactivity		Total β radioactivity	4.6 <sup>Note 3</sup>				8.7 <sup>Note 3</sup>	
		Outside the site: 3 points		Once/week		Total α radioactivity	* ~ 0.20				mBq/m <sup>3</sup>	* ~ 0.37
		Total β radioactivity	Total β radioactivity	* ~ 0.63	* ~ 1.2							
	Inside the site: 9 points, Outside the site: 3 points	Continuously	<sup>106</sup> Ru	Once/3 months	<sup>106</sup> Ru	ND	mBq/m <sup>3</sup>		- Sampling period: inside the site: from April 1 to July 1, 2007 outside the site: from April 2 to July 2, 2007	ND		
			Pu(a) <sup>Note 4</sup>		Pu(a) <sup>Note 4</sup>	ND				ND		
	Gaseous beta radioactivity concentration	Outside the site: 3 points	Continuously	<sup>85</sup> Kr	Continuously	<sup>85</sup> Kr	ND-2 <sup>Note 3, Note 5</sup>	kBq/m <sup>3</sup>			ND <sup>Note 3</sup>	
Iodine	Outside the site: 3 points	<sup>131</sup> I		Once/week		<sup>131</sup> I	ND				mBq/m <sup>3</sup>	- Sampling period: from April 2 to July 2, 2007
Moisture in air	Outside the site: 3 points	Continuously	<sup>3</sup> H	Once/month	<sup>3</sup> H	ND	mBq/m <sup>3</sup>		- Sampling period: from March 30 to June 29, 2007	ND		
Drinking water	Outside the site: 4 points	Once/3 months	<sup>3</sup> H	Once/3 months	<sup>3</sup> H	ND	Bq/L			ND		
			<sup>90</sup> Sr		<sup>90</sup> Sr	ND				ND		
			<sup>106</sup> Ru		<sup>106</sup> Ru	ND				mBq/L	- Sampling date: April 5 and 11, 2007	ND
			<sup>137</sup> Cs		<sup>137</sup> Cs	ND				ND		
			Pu(a) <sup>Note 4</sup>		Pu(a) <sup>Note 4</sup>	ND				ND		
Land soil	Surface soil	Once/year	<sup>90</sup> Sr	Once/year	<sup>90</sup> Sr		Bq/kg dry		- Will be reported in 2nd quarter.	1.5 - 9.4		
			<sup>106</sup> Ru		<sup>106</sup> Ru					ND		
			<sup>129</sup> I		<sup>129</sup> I					ND		
			<sup>137</sup> Cs		<sup>137</sup> Cs					8 - 37		
			Pu(a) <sup>Note 4</sup>		Pu(a) <sup>Note 4</sup>					0.23 - 0.91		
	Lake-bottom soil	Once/year	Once/year	<sup>241</sup> Am	Once/year	<sup>241</sup> Am		Bq/kg dry		- Will be reported in 3rd quarter.	0.09 - 0.33	
				<sup>244</sup> Cm		<sup>244</sup> Cm					ND	
				<sup>90</sup> Sr		<sup>90</sup> Sr					ND - 0.5	
				<sup>137</sup> Cs		<sup>137</sup> Cs					5 - 11	
				Pu(a) <sup>Note 4</sup>		Pu(a) <sup>Note 4</sup>					0.97 - 1.3	
Land plant	Polished rice	Once/year	<sup>14</sup> C	Once/year	<sup>14</sup> C		Bq/g · carbon		- Will be reported in 3rd quarter.	0.23 - 0.25		
			<sup>106</sup> Ru		<sup>106</sup> Ru					ND		
			Pu(a) <sup>Note 4</sup>		Pu(a) <sup>Note 4</sup>					ND		
	Root vegetable	Once/year	Once/year	<sup>106</sup> Ru	Once/year	<sup>106</sup> Ru		Bq/kg raw		- Will be reported in 2nd quarter. Object: potato	ND	
				Pu(a) <sup>Note 4</sup>		Pu(a) <sup>Note 4</sup>					ND	
	Leaf vegetable	Once/year	Once/year	<sup>106</sup> Ru	Once/year	<sup>106</sup> Ru		Bq/kg raw		- Will be reported in 3rd quarter. Object: Chinese cabbage	ND	
Farm product	Milk	Once/3 months	<sup>106</sup> Ru	Once/3 months	<sup>106</sup> Ru	ND	Bq/L		- Sampling date: April 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 periods

Note 3) Indicates 1 hour average values.

Note 4) Pu(a): indicates the sum of <sup>238</sup>Pu and <sup>239+240</sup>Pu.

Note 5) At the Futamata monitoring station, 1 hour average value from 9 to 10 on April 9 was over ND. All was ND at other points and periods.