## REVISED

## [Definite Report] Nuclide Analysis Result of Seawater < Offshore of Ibaraki Prefecture>

Place of Sampling	3 km offsh Takadokoban			3 km offshore of Kujihama shore		ore of ore	3 km offshore shore		3 km offshore shore		② Density limit by the announcement of
Time of Sampling	09:03 May 1	1 2011	08:02 May 1	1 2011	10:53 May 1	1 2011	(6) 07:30 May 1	1 2011	08:48 May 1	1 2011	Reactor Regulation (Bq/cm3) (the density limit in the
Detected Nuclides (Half-life)	density of sample (Bq/cm3)	Scaling Factor (1)/2)	density of sample (Bq/cm3)	Scaling Factor (1)/2)	density of sample (Bq/cm3)	Scaling Factor (1)/2)	density of sample (Bq/cm3)	Scaling Factor (1)/2)	density of sample (Bq/cm3)	Scaling Factor (1)/2)	water outside of surrounding monitored areas in the section 6 of the appendix 2)
I-131 (approx.8days)	ND	-	ND	-	ND	-	ND	i	ND	-	4E-02
Cs-134 (approx.2years)	ND	-	ND	-	ND	-	ND	i	ND	-	6E-02
Cs-137 (approx.30years)	ND	-	ND	-	ND	ı	ND	ı	ND	-	9E-02
Mo-99 (approx.66hrs)	ND	-	ND	-	ND	ı	ND	ı	ND	-	(1) 1E+00
Tc-99m (approx.6hrs)	ND		ND	-	ND	-	ND	-	ND	-	4E+01
Te-129m (approx.34days)	ND	-	ND	-	ND	-	ND	-	ND	-	3E-01
Te-129 (approx. 70mins)	ND	-	ND	-	ND	-	ND	-	ND	-	1E+01
Te-132 (approx.3days)	ND	-	ND	-	ND	-	ND	-	ND	-	2E-01
I-132 (approx.2hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	3E+00
Cs-136 (approx.13days)	ND	-	ND	-	ND	-	ND	-	ND	-	3E-01
Ba-140 (approx.13days)	ND	-	ND	-	ND	-	ND	-	ND	-	3E-01
La-140 (approx.2days)	ND	-	ND	-	ND	-	ND	-	ND	-	4E-01

<sup>\*</sup> O.OE-O means O.O x 10-O

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

## [Definite Report] Nuclide Analysis Result of Seawater < Offshore of Ibaraki Prefecture>

Place of Sampling	3 km offsh Takadokoban		3 km offsh Kujihama		3 km offsh Oarai sh		3 km offshore shore		3 km offshore shore		② Density limit by the announcement of Reactor Regulation
Time of Sampling	09:03 May 1	1 2011	08:02 May 1	1 2011	10:53 May 1	1 2011	08:48 May 1	1 2011	07:30 May 1	1 2011	(Bq/cm3) (the density limit in the
Detected Nuclides (Half-life)	Density of sample (Bq/cm3)	Scaling Factor (1)/2)	Density of sample (Bq/cm3)	Scaling Factor (1)/2)	Density of sample (Bq/cm3)	Scaling Factor (1)/2)	Density of sample (Bq/cm3)	Scaling Factor (1)/2)	Density of sample (Bq/cm3)	Scaling Factor (1)/2)	water outside of surrounding monitored areas in the section 6 of the appendix 2)
I-131 (approx.8days)	ND	-	ND	-	ND	-	ND	-	ND	-	4E-02
Cs-134 (approx.2years)	ND	-	ND	-	ND	-	ND	-	ND	-	6E-02
Cs-137 (approx.30years)	ND	-	ND	-	ND	-	ND	-	ND	-	9E-02
Mo-99 (approx.66hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	4E+01
Tc-99m (approx.6hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	4E+01
Te-129m (approx.34days)	ND	-	ND	-	ND	-	ND	-	ND	-	3E-01
Te-129 (approx. 70mins)	ND	-	ND	-	ND	-	ND	-	ND	-	1E+01
Te-132 (approx.3days)	ND	-	ND	-	ND	-	ND	-	ND	-	2E-01
I-132 (approx.2hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	3E+00
Cs-136 (approx.13days)	ND	-	ND	-	ND	-	ND	-	ND	-	3E-01
Ba-140 (approx.13days)	ND	-	ND	-	ND	-	ND	-	ND	-	3E-01
La-140 (approx.2days)	ND	-	ND	-	ND	-	ND	-	ND	-	4E-01

<sup>\*</sup> O.OE-O means O.O x 10-O

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

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Place of Sampling	Fukushima Daiichi NPS 1U sub-drain	Fukushima Daiichi NPS 2U sub-drain	Fukushima Daiichi NPS 3U sub-drain	Fukushima Daiichi NPS 4U sub-drain	Fukushima Daiichi NPS 5U sub-drain	Fukushima Daiichi NPS 6U sub-drain	Fukushima Daiichi NPS Deep well
Time of Sampling	11:40 Jun 20 2011	11:36 Jun 20 2011	11:32 Jun 20 2011	11:43 Jun 20 2011	11:20 Jun 20 2011	11:15 Jun 20 2011	16:55 Jun 20 2011
Detected Nuclides (Half-life)			Der	sity of sample ( Bq/o	cm3)		
I-131 (approx. 8 days)	ND	5.7E-01	ND	ND	ND	ND	ND
Cs-134 (approx. 2 years)	3.2E+00	1.1E+01	8.6E-02	ND	ND	ND	ND
Cs-137 (approx. 30 years)	4.0E+00	1.3E+01	8.2E-02	ND	ND	ND	ND
Nb-95 (approx.35days)	ND	ND	ND	ND	ND	ND	ND
Sb-125 (approx.3years)	ND	ND	ND	ND	ND	ND	ND
Ag-110m (approx.250days)	(2) ND	ND	ND	ND	ND	ND	ND
Te-129 (approx.70mins)	ND	ND	ND	ND	ND	ND	ND
Te-129m (approx.34days)	ND	ND	ND	ND	ND	ND	ND
Cs-136 (approx.13days)	ND	ND	ND	ND	ND	ND	ND
Ba-140 (approx.13days)	ND	ND	ND	ND	ND	ND	ND
La-140 (approx.2days)	ND	ND	ND	ND	ND	ND	ND

<sup>\*</sup> O.OE - O means O.O x 10-O

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits.

Detection limits of the three main nuclides are as follows: I-131: approx. 4E-2Bq/cm3, Cs-134: 2E-2Bq/cm3, Cs-137: 2E-2Bq/cm3.

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

Place of Sampling	Fukushima Daiichi NPS 1U sub-drain	Fukushima Daiichi NPS 2U sub-drain	Fukushima Daiichi NPS 3U sub-drain	Fukushima Daiichi NPS 4U sub-drain	Fukushima Daiichi NPS 5U sub-drain	Fukushima Daiichi NPS 6U sub-drain	Fukushima Daiichi NPS Deep well
Time of Sampling	11:40 Jun 20 2011	11:36 Jun 20 2011	11:32 Jun 20 2011	11:43 Jun 20 2011	11:20 Jun 20 2011	11:15 Jun 20 2011	16:55 Jun 20 2011
Detected Nuclides (Half-life)			Der	nsity of sample ( Bq/o	cm3)		
I-131 (approx. 8 days)	ND	5.7E-01	ND	ND	ND	ND	ND
Cs-134 (approx. 2 years)	3.2E+00	1.1E+01	8.6E-02	ND	ND	ND	ND
Cs-137 (approx. 30 years)	4.0E+00	1.3E+01	8.2E-02	ND	ND	ND	ND
Nb-95 (approx.35days)	ND	ND	ND	ND	ND	ND	ND
Sb-125 (approx.3years)	ND	ND	ND	ND	ND	ND	ND
Ag-110m (approx.250days)	6.6E-02	ND	ND	ND	ND	ND	ND
Te-129 (approx.70mins)	ND	ND	ND	ND	ND	ND	ND
Te-129m (approx.34days)	ND	ND	ND	ND	ND	ND	ND
Cs-136 (approx.13days)	ND	ND	ND	ND	ND	ND	ND
Ba-140 (approx.13days)	ND	ND	ND	ND	ND	ND	ND
La-140 (approx.2days)	ND	ND	ND	ND	ND	ND	ND

<sup>\*</sup> O.OE - O means O.O x 10-O

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits.

Detection limits of the three main nuclides are as follows: I-131: approx. 4E-2Bq/cm3, Cs-134: 2E-2Bq/cm3, Cs-137: 2E-2Bq/cm3.

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

Place of Sampling				Fukushima Daiichi NPS 4U sub-drain			Fukushima Daiichi NPS Deep well
Time of Sampling	12:27 Jun 29 2011	12:17 Jun 29 2011	12:13 Jun 29 2011	11:55 Jun 29 2011	12:02 Jun 29 2011	11:58 Jun 29 2011	09:50 Jun 29 2011
Detected Nuclides (Half-life)			Den	sity of sample ( Bq/o	cm3)		
I-131 (approx. 8 days)	ND	3.0E-01	1.3E-01	ND	ND	ND	ND
Cs-134 (approx. 2 years)	3.1E+00	9.1E+00	3.1E-01	1.4E-02	ND	9.7E-03	ND
Cs-137 (approx. 30 years)	3.8E+00	1.1E+01	4.0E-01	2.4E-02	ND	1.1E-02	ND
Nb-95 (approx.35days)	ND	ND	ND	ND	ND	ND	ND
Sb-125 (approx.3years)	ND	ND	ND	ND	ND	ND	ND
Ag-110m (approx.250days)	(2) 2.6E-02	ND	ND	ND	ND	ND	ND
Te-129 (approx.70mins)	ND	ND	ND	ND	ND	ND	ND
Te-129m (approx.34days)	ND	ND	ND	ND	ND	ND	ND
Cs-136 (approx.13days)	ND	ND	ND	ND	ND	ND	ND
Ba-140 (approx.13days)	ND	ND	ND	ND	ND	ND	ND
La-140 (approx.2days)	ND	ND	ND	ND	ND	ND	ND

<sup>\*</sup> O.OE - O means O.O x 10-O

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits.

Detection limits of the three main nuclides are as follows: I-131: approx. 3E-2Bq/cm3, Cs-134: 6E-3Bq/cm3, Cs-137: 7E-3Bq/cm3.

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

Place of Sampling				Fukushima Daiichi NPS 4U sub-drain			Fukushima Daiichi NPS Deep well
Time of Sampling	12:27 Jun 29 2011	12:17 Jun 29 2011	12:13 Jun 29 2011	11:55 Jun 29 2011	12:02 Jun 29 2011	11:58 Jun 29 2011	09:50 Jun 29 2011
Detected Nuclides (Half-life)			Den	sity of sample ( Bq/o	cm3)		
I-131 (approx. 8 days)	ND	3.0E-01	1.3E-01	ND	ND	ND	ND
Cs-134 (approx. 2 years)	3.1E+00	9.1E+00	3.1E-01	1.4E-02	ND	9.7E-03	ND
Cs-137 (approx. 30 years)	3.8E+00	1.1E+01	4.0E-01	2.4E-02	ND	1.1E-02	ND
Nb-95 (approx.35days)	ND	ND	ND	ND	ND	ND	ND
Sb-125 (approx.3years)	ND	ND	ND	ND	ND	ND	ND
Ag-110m (approx.250days)	ND	ND	ND	ND	ND	ND	ND
Te-129 (approx.70mins)	ND	ND	ND	ND	ND	ND	ND
Te-129m (approx.34days)	ND	ND	ND	ND	ND	ND	ND
Cs-136 (approx.13days)	ND	ND	ND	ND	ND	ND	ND
Ba-140 (approx.13days)	ND	ND	ND	ND	ND	ND	ND
La-140 (approx.2days)	ND	ND	ND	ND	ND	ND	ND

<sup>\*</sup> O.OE - O means O.O x 10-O

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits.

Detection limits of the three main nuclides are as follows: I-131: approx. 3E-2Bq/cm3, Cs-134: 6E-3Bq/cm3, Cs-137: 7E-3Bq/cm3.

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

# **REVISED**

[ Definite Report ] The Results of Nuclide Analyses of Radioactive Materials in the Seawater <3/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Inside the sout 1-4 Water I	th of 1F's Units ntake Canal									Density limit by the announcement of
Date of sampling	07:16 May	y 15, 2011									Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	monitored areas in the section 6 of the appendix 2)
I-131 (approx. 8 days)	270	6.8									40
Cs-134 (approx. 2 years)	1,400	23									60
Cs-137 (approx. 30 years)	1,500	17									90
Mn-54 (approx. 313days)	ND	-									1,000
Co-60 (approx. 5years)	ND	-									200
Tc-99m (approx. 6hrs)	ND	-									40,000
Cs-136 (approx. 13days)	(2) 14	0.05									300
Ba-140 (approx. 13days)	ND	-									300
La-140 (approx. 2days)	21	0.05									400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

[Definite Report] The Results of Nuclide Analyses of Radioactive Materials in the Seawater <3/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Inside the sout 1-4 Water I	th of 1F's Units ntake Canal									Density limit by the announcement of
Date of sampling	07:16 May	y 15, 2011									Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding
Time of Sampling	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	monitored areas in the section 6 of the appendix 2)
I-131 (approx. 8 days)	270	6.8									40
Cs-134 (approx. 2 years)	1,400	23									60
Cs-137 (approx. 30 years)	1,500	17									90
Mn-54 (approx. 313days)	ND	-									1,000
Co-60 (approx. 5years)	ND	-									200
Tc-99m (approx. 6hrs)	ND	-									40,000
Cs-136 (approx. 13days)	140	0.47									300
Ba-140 (approx. 13days)	ND	-									300
La-140 (approx. 2days)	21	0.05									400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

## **REVISED**

【 Definite Report 】 The Results of Nuclide Analyses of Radioactive Materials in the Seawater <2/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Screen of (inside the		Screen of 1F's Unit 3 (outside the silt fence)		Screen of 1F's Unit 3 (inside the silt fence)		Screen of 1F's Unit 4 (outside the silt fence)		Screen of 1F's Unit 4 (inside the silt fence)		Density limit by the
Date of sampling	06:34 May	y 28, 2011	06:48 May 28, 2011		06:44 May 28, 2011		06:48 May 28, 2011		06:44 May 28, 2011		announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	areas in the section 6 of
I-131 (approx. 8 days)	24,000	600	410	10	720	18	410	10	160	4.0	40
Cs-134 (approx. 2 years)	4,100	68	1,300	22	5,100	85	4,700	78	4,500	75	60
Cs-137 (approx. 30 years)	4,300	48	1,400	16	5,400	60	5,100	57	4,800	53	90
Mn-54 (approx. 313days)	ND	-	ND	-	ND	-	ND	-	ND	-	1,000
Co-60 (approx. 5years)	ND	-	ND	-	ND	-	ND	-	ND	-	200
Tc-99m (approx. 6hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	40,000
Te-129 (approx. 70mins)	ND	-	ND	-	ND	-	ND	-	620	(3) 0.06	10,000
Cs-136 (approx. 13days)	19	0.06	ND	-	23	0.08	ND	-	21	0.07	300
Ba-140 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
La-140 (approx. 2days)	ND	-	ND	-	ND	-	11	0.03	ND	-	400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits of seawater.

[ Definite Report ] The Results of Nuclide Analyses of Radioactive Materials in the Seawater <2/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Screen of (inside the		Screen of 1F's Unit 3 (outside the silt fence)		Screen of 1F's Unit 3 (inside the silt fence)		Screen of (outside the		Screen of 1F's Unit 4 (inside the silt fence)		Density limit by the announcement of
Date of sampling	06:34 May	/ 28, 2011	06:48 May	/ 28, 2011	06:44 May	06:44 May 28, 2011		y 28, 2011	06:44 May 28, 2011		Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored
Time of Sampling	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	areas in the section 6 of the appendix 2)
I-131 (approx. 8 days)	24,000	600	410	10	720	18	410	10	160	4.0	40
Cs-134 (approx. 2 years)	4,100	68	1,300	22	5,100	85	4,700	78	4,500	75	60
Cs-137 (approx. 30 years)	4,300	48	1,400	16	5,400	60	5,100	57	4,800	53	90
Mn-54 (approx. 313days)	ND	-	ND	-	ND	-	ND	-	ND	-	1,000
Co-60 (approx. 5years)	ND	1	ND	1	ND	-	ND	-	ND	-	200
Tc-99m (approx. 6hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	40,000
Te-129 (approx. 70mins)	ND	-	ND	-	ND	-	ND	-	620	0.10	10,000
Cs-136 (approx. 13days)	19	0.06	ND	-	23	0.08	ND	-	21	0.07	300
Ba-140 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
La-140 (approx. 2days)	ND	-	ND	-	ND	-	11	0.03	ND	-	400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits of seawater.

## **REVISED**

[ Definite Report ] The Results of Nuclide Analyses of Radioactive Materials in the Seawater <2/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Screen of (inside the		Screen of 1F's Unit 3 (outside the silt fence)		Screen of 1F's Unit 3 (inside the silt fence)			1F's Unit 4 e silt fence)		1F's Unit 4 silt fence)	Density limit by the announcement of
Date of sampling	07:07 Jun	29, 2011	07:10 Jun	29, 2011	07:13 Jun 29, 2011		07:17 Jun 29, 2011		07:19 Jun 29, 2011		Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	areas in the section 6 of the appendix 2)
I-131 (approx. 8 days)	270	6.8	49	1.2	98	2.5	40	1.0	40	1.0	40
Cs-134 (approx. 2 years)	860	14	230	3.8	4,500	75	270	4.5	1,200	20	60
Cs-137 (approx. 30 years)	940	10	270	3.0	4,800	53	280	3.1	1,300	14	90
Mn-54 (approx. 313days)	ND	-	ND	-	15	(3) 0.02	ND	-	ND	-	1,000
Co-60 (approx. 5years)	ND	-	ND	-	ND	-	ND	-	ND	-	200
Tc-99m (approx. 6hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	40,000
Te-129m (approx. 34days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Te-129 (approx. 70mins)	ND	-	ND	-	ND	-	ND	-	ND	-	10,000
Cs-136 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Ba-140 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
La-140 (approx. 2days)	ND	-	ND	-	ND	-	ND	-	ND	-	400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits of seawater.

【 Definite Report 】 The Results of Nuclide Analyses of Radioactive Materials in the Seawater <2/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Screen of (inside the		Screen of 1F's Unit 3 (outside the silt fence)		Screen of 1F's Unit 3 (inside the silt fence)		Screen of 1F's Unit 4 (outside the silt fence)		Screen of 1F's Unit 4 (inside the silt fence)		Density limit by the announcement of
Date of sampling	07:07 Jun	29, 2011	07:10 Jun 29, 2011		07:13 Jun 29, 2011		07:17 Jun 29, 2011		07:19 Jun 29, 2011		Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored
Time of Sampling	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	areas in the section 6 of the appendix 2)
I-131 (approx. 8 days)	270	6.8	49	1.2	98	2.5	40	1.0	40	1.0	40
Cs-134 (approx. 2 years)	860	14	230	3.8	4,500	75	270	4.5	1,200	20	60
Cs-137 (approx. 30 years)	940	10	270	3.0	4,800	53	280	3.1	1,300	14	90
Mn-54 (approx. 313days)	ND	-	ND	-	15	0.0	ND	-	ND	-	1,000
Co-60 (approx. 5years)	ND	-	ND	-	ND	-	ND	-	ND	-	200
Tc-99m (approx. 6hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	40,000
Te-129m (approx. 34days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Te-129 (approx. 70mins)	ND	-	ND	-	ND	-	ND	-	ND	-	10,000
Cs-136 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Ba-140 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
La-140 (approx. 2days)	ND	-	ND	-	ND	-	ND	-	ND	-	400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits of seawater.

**REVISED** 

[ Definite Report ] The Results of Nuclide Analyses of Radioactive Materials in the Seawater <3/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Inside the sout 1-4 Water Ir										Density limit by the announcement of
Date of sampling	07:25 Jun	29, 2011									Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	areas in the section 6 of the appendix 2)
I-131 (approx. 8 days)	47	(3) 1.2									40
Cs-134 (approx. 2 years)	200	3.3									60
Cs-137 (approx. 30 years)	220	2.4									90
Mn-54 (approx. 313days)	ND	-									1,000
Co-60 (approx. 5years)	ND	-									200
Tc-99m (approx. 6hrs)	ND	-									40,000
Te-129m (approx. 34days)	ND	-									300
Te-129 (approx. 70mins)	ND	-									10,000
Cs-136 (approx. 13days)	ND	-									300
Ba-140 (approx. 13days)	ND	-									300
La-140 (approx. 2days)	ND	-									400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits of seawater.

[ Definite Report ] The Results of Nuclide Analyses of Radioactive Materials in the Seawater <3/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Inside the sout 1-4 Water Ir										Density limit by the announcement of
Date of sampling	07:25 Jun	29, 2011									Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored
Time of Sampling	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	areas in the section 6 of the appendix 2)
I-131 (approx. 8 days)	47	1.18									40
Cs-134 (approx. 2 years)	200	3.3									60
Cs-137 (approx. 30 years)	220	2.4									90
Mn-54 (approx. 313days)	ND	-									1,000
Co-60 (approx. 5years)	ND	-									200
Tc-99m (approx. 6hrs)	ND	-									40,000
Te-129m (approx. 34days)	ND	-									300
Te-129 (approx. 70mins)	ND	-									10,000
Cs-136 (approx. 13days)	ND	-									300
Ba-140 (approx. 13days)	ND	-									300
La-140 (approx. 2days)	ND	-									400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits of seawater.

## REVISED

[ Definite Report] The Results of Nuclide Analyses of Radioactive Materials in the Seawater <1/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Shallow Draf	t Quay of 1F	Inside north wa of 1F's U	ter intake canal Jnits 1-4	Screen of (outside the		Screen of (inside the		Screen of 1F's Unit 2 (outside the silt fence)		Density limit by the announcement of
Date of sampling	07:16 Jul	06, 2011	07:28 Jul	06, 2011	07:35 Jul 06, 2011		07:35 Jul 06, 2011		07:45 Jul 06, 2011		Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	areas in the section 6 of the appendix 2)
I-131 (approx. 8 days)	ND	-	19	(3) 0.48	26	(3) 0.65	ND	-	34	(3) 0.85	40
Cs-134 (approx. 2 years)	77	1.3	350	5.8	320	5.3	320	5.3	380	6.3	60
Cs-137 (approx. 30 years)	87	(3) 0.97	380	4.2	360	4.0	340	3.8	380	4.2	90
Mn-54 (approx. 313days)	ND	-	ND	-	ND	-	ND	-	ND	-	1,000
Co-60 (approx. 5years)	ND	-	ND	-	ND	-	ND	-	ND	-	200
Tc-99m (approx. 6hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	40,000
Te-129m (approx. 34days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Te-129 (approx. 70mins)	ND	•	ND	-	ND	-	ND	-	ND	-	10,000
Cs-136 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Ba-140 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
La-140 (approx. 2days)	ND	-	ND	-	ND	-	ND	-	ND	-	400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits.

Detection limits of the three main nuclides are as follows: I-131: approx. 21Bq/L.

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

[ Definite Report ] The Results of Nuclide Analyses of Radioactive Materials in the Seawater <1/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Shallow Draf	t Quay of 1F	Inside north wa of 1F's U		Screen of (outside the		Screen of (inside the			1F's Unit 2 e silt fence)	Density limit by the announcement of
Date of sampling	07:16 Jul	06, 2011	07:28 Jul	06, 2011	07:35 Jul	06, 2011	07:35 Jul	06, 2011	07:45 Jul	06, 2011	Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored
Time of Sampling	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	areas in the section 6 of the appendix 2)
I-131 (approx. 8 days)	ND	-	19	0.5	26	0.7	ND	-	34	0.9	40
Cs-134 (approx. 2 years)	77	1.3	350	5.8	320	5.3	320	5.3	380	6.3	60
Cs-137 (approx. 30 years)	87	1.0	380	4.2	360	4.0	340	3.8	380	4.2	90
Mn-54 (approx. 313days)	ND	-	ND	-	ND	-	ND	-	ND	-	1,000
Co-60 (approx. 5years)	ND	-	ND	-	ND	-	ND	-	ND	-	200
Tc-99m (approx. 6hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	40,000
Te-129m (approx. 34days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Te-129 (approx. 70mins)	ND	-	ND	-	ND	-	ND	-	ND	-	10,000
Cs-136 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Ba-140 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
La-140 (approx. 2days)	ND	-	ND	-	ND	-	ND	-	ND	-	400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits.

Detection limits of the three main nuclides are as follows: I-131: approx. 21Bq/L.

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

## **REVISED**

[ Definite Report] The Results of Nuclide Analyses of Radioactive Materials in the Seawater <2/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Screen of (inside the	1F's Unit 2 silt fence)	Screen of (outside the	1F's Unit 3 e silt fence)	Screen of (inside the	1F's Unit 3 silt fence)	Screen of (outside the		Screen of (inside the	1F's Unit 4 silt fence)	Density limit by the announcement of
Date of sampling	07:46 Jul	06, 2011	07:56 Jul	06, 2011	07:59 Jul	06, 2011	07:57 Jul	06, 2011	07:58 Jul	06, 2011	Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	areas in the section 6 of the appendix 2)
I-131 (approx. 8 days)	45	1.1	26	(3) 0.65	ND	-	31	(3) 0.78	25	(3) 0.63	40
Cs-134 (approx. 2 years)	510	8.5	400	6.7	4,000	(3) 67	380	6.3	470	7.8	60
Cs-137 (approx. 30 years)	540	6.0	430	4.8	4,300	(3) 48	420	4.7	480	5.3	90
Mn-54 (approx. 313days)	ND	-	ND	-	ND	-	ND	-	ND	-	1,000
Co-60 (approx. 5years)	ND	-	ND	-	ND	-	ND	-	ND	-	200
Tc-99m (approx. 6hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	40,000
Te-129m (approx. 34days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Te-129 (approx. 70mins)	ND	-	ND	-	ND	-	ND	-	ND	-	10,000
Cs-136 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Ba-140 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
La-140 (approx. 2days)	ND	-	ND	-	ND	-	ND	-	ND	-	400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits.

Detection limits of the three main nuclides are as follows: I-131: approx. 47Bq/L.

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

[ Definite Report] The Results of Nuclide Analyses of Radioactive Materials in the Seawater <2/3>
Fukushima Daiichi Nuclear Power Station; the shallow draft quay, Units 1-4 screen, and the water intake canal of Units 1-4

Place of Sampling	Screen of (inside the		Screen of (outside the		Screen of (inside the	1F's Unit 3 silt fence)	Screen of (outside the		Screen of (inside the	1F's Unit 4 silt fence)	Density limit by the announcement of
Date of sampling	07:46 Jul	06, 2011	07:56 Jul	06, 2011	07:59 Jul	06, 2011	07:57 Jul	06, 2011	07:58 Jul	06, 2011	Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored
Time of Sampling	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	areas in the section 6 of the appendix 2)
I-131 (approx. 8 days)	45	1.1	26	0.7	ND	-	31	0.8	25	0.6	40
Cs-134 (approx. 2 years)	510	8.5	400	6.7	4,000	66.7	380	6.3	470	7.8	60
Cs-137 (approx. 30 years)	540	6.0	430	4.8	4,300	47.8	420	4.7	480	5.3	90
Mn-54 (approx. 313days)	ND	-	ND	-	ND	-	ND	-	ND	-	1,000
Co-60 (approx. 5years)	ND	-	ND	-	ND	-	ND	-	ND	-	200
Tc-99m (approx. 6hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	40,000
Te-129m (approx. 34days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Te-129 (approx. 70mins)	ND	-	ND	-	ND	-	ND	-	ND	-	10,000
Cs-136 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
Ba-140 (approx. 13days)	ND	-	ND	-	ND	-	ND	-	ND	-	300
La-140 (approx. 2days)	ND	-	ND	-	ND	-	ND	-	ND	-	400

<sup>\*</sup> Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

<sup>\*</sup> In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

<sup>\*</sup> In this analysis, "ND" means that the results are bellow detection limits.

Detection limits of the three main nuclides are as follows: I-131: approx. 47Bq/L.

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

REVISED (Attachment 3)

### Fukushima Daiichi Nuclear Power Station: Uranium analysis result in the soil

### 1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot	Date of sampling/			
(): Distance from the stack of Unit 1, 2	Analyses	U-234	U-235	U-238
	organization			
Playground ( west-northwest approx.	March 28/	12±0.6	0.50±0.086	12±0.6
500m)	Japan Chemical	12±0.0	0.50±0.060	12±0.0
Adjacent to industrial waste disposal	Analysis Center	4.4±0.27	0.23±0.057	4.3±0.27
facility( south-southwest approx. 500m)	-	4.4±0.27	0.23±0.037	4.5±0.27
Natural Uranium specific radioa	ctivity (Bq/g)	1.2×10 <sup>4</sup>	5.7×10 <sup>2</sup>	1.2×10 <sup>4</sup>
Natural Uranium abundance r	0.0054	0.72	99.3	

#### 2. Evaluation

Uranium detected for this analysis is valued as the same level as in the natural condition for following reasons.

- Radioactive densities of U-234 and U-238 are same in the sample and the sample , where Uranium in nature forms radioactive balance (same density between U-234 and U-238).
- U-235 abundance ratio is almost same as the natural U-235 abundance ratio, which is U-235/U-238 = 0.0073.

U-235 abundance ratio of sample :  $6.2 \times 10^{-6}$  g(0.5Bq/kg Dry soil) U-238 abundance ratio of sample :  $9.6 \times 10^{-4}$  g(12Bq/kg Dry soil)

U-235/U-238=0.0065 (2) 0.0073

U-235 abundance ratio of sample :  $2.9 \times 10^{-6} g(0.23 Bq/kg Dry soil)$ U-238 abundance ratio of sample :  $3.5 \times 10^{-4} g(4.3 Bq/kg Dry soil)$ 

U-235/U-238=0.0083 (2) 0.0072

ORIGINAL (Attachment 3)

#### Fukushima Daiichi Nuclear Power Station: Uranium analysis result in the soil

### 1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot	Date of sampling/			
(): Distance from the stack of Unit 1, 2	Analyses	U-234	U-235	U-238
	organization			
Playground ( west-northwest approx. 500m )	March 28/ Japan Chemical	12±0.6	0.50±0.086	12±0.6
Adjacent to industrial waste disposal facility (south-southwest approx. 500m)	Analysis Center	4.4±0.27	0.23±0.057	4.3±0.27
Natural Uranium specific radioa	1.2×10 <sup>4</sup>	5.7×10 <sup>2</sup>	1.2×10 <sup>4</sup>	
Natural Uranium abundance r	ratio (wt%)	0.0054	0.72	99.3

#### 2. Evaluation

Uranium detected for this analysis is valued as the same level as in the natural condition for following reasons.

- Radioactive densities of U-234 and U-238 are same in the sample and the sample , where Uranium in nature forms radioactive balance (same density between U-234 and U-238).
- U-235 abundance ratio is almost same as the natural U-235 abundance ratio, which is U-235/U-238=0.0073.

U-235 abundance ratio of sample :  $6.2 \times 10^{-6}$  g(0.5Bq/kg Dry soil) U-238 abundance ratio of sample :  $9.6 \times 10^{-4}$  g(12Bq/kg Dry soil)

U-235/U-238=0.0064 0.0073

U-235 abundance ratio of sample : 2.9×10<sup>-6</sup>g(0.23Bq/kg Dry soil)
U-238 abundance ratio of sample : 3.5×10<sup>-4</sup>g(4.3Bq/kg Dry soil)

U-235/U-238=0.0084 0.0072

REVISED (Attachment 3)

### Fukushima Daiichi Nuclear Power Station: Uranium analysis result in the soil

### 1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot  (): Distance from the stack  of Unit 1, 2	Date of sampling/ Analyses organization	U-234	U-235	U-238
Playground ( west-northwest approx. 500m)	April 11/ Japan Chemical Analysis Center	8.0±0.45	0.35±0.075	7.4±0.42
Forest of wild birds ( west approx. 500m )		7.5±0.44	0.43±0.090	6.7±0.41
Adjacent to industrial waste disposal facility ( south-southwest approx. 500m )		3.9±0.29	N.D.	3.9±0.29
Natural Uranium specific radio	pactivity (Bq/g)	1.2×10 <sup>4</sup>	5.7×10 <sup>2</sup>	1.2×10 <sup>4</sup>
Natural Uranium abundance r	ratio (wt%)	0.0054	0.72	99.3

#### 2. Evaluation

Uranium detected for this analysis is valued as the same level as in the natural condition for following reasons.

- Radioactive densities of U-234 and U-238 are same in all the samples, where Uranium in nature forms radioactive balance (same density between U-234 and U-238).
- U-235 abundance ratio is almost same as the natural U-235 abundance ratio, which is U-235/U-238 = 0.0073.

U-235 abundance ratio of sample :  $4.4 \times 10^{-6}$  g(0.35Bq/kg Dry soil)

U-238 abundance ratio of sample : 5.9 (2) ×10<sup>-4</sup>g (7.4Bq/kg Dry soil)

U-235/U-238=0.0074 (2) 0.0073

U-235 abundance ratio of sample : 5.4×10<sup>-6</sup>g(0.43Bq/kg Dry soil)
U-238 abundance ratio of sample : 5.4×10<sup>-4</sup>g(6.7Bq/kg Dry soil)

U-235/U-238=0.0100 (2) 0.0073

ORIGINAL (Attachment 3)

#### Fukushima Daiichi Nuclear Power Station: Uranium analysis result in the soil

### 1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot  (): Distance from the stack  of Unit 1, 2	Date of sampling/ Analyses organization	U-234	U-235	U-238
Playground ( west-northwest approx. 500m)	April 11/ Japan Chemical Analysis Center	8.0±0.45	0.35±0.075	7.4±0.42
Forest of wild birds ( west approx. 500m )		7.5±0.44	0.43±0.090	6.7±0.41
Adjacent to industrial waste disposal facility ( south-southwest approx. 500m )		3.9±0.29	N.D.	3.9±0.29
Natural Uranium specific radio	pactivity (Bq/g)	1.2×10 <sup>4</sup>	5.7×10 <sup>2</sup>	1.2×10 <sup>4</sup>
Natural Uranium abundance r	ratio (wt%)	0.0054	0.72	99.3

### 2. Evaluation

Uranium detected for this analysis is valued as the same level as in the natural condition for following reasons.

- Radioactive densities of U-234 and U-238 are same in all the samples, where Uranium in nature forms radioactive balance (same density between U-234 and U-238).
- U-235 abundance ratio is almost same as the natural U-235 abundance ratio, which is U-235/U-238 = 0.0073.

U-235 abundance ratio of sample :  $4.4 \times 10^{-6}$  g(0.35Bq/kg Dry soil) U-238 abundance ratio of sample :  $6.0 \times 10^{-4}$  g (7.4Bq/kg Dry soil)

U-235/U-238=0.0080 0.0073

U-235 abundance ratio of sample :  $5.4 \times 10^{-6}$  g(0.43Bq/kg Dry soil) U-238 abundance ratio of sample :  $5.4 \times 10^{-4}$  g(6.7Bq/kg Dry soil)

U-235/U-238=0.0099 0.0073

REVISED (Attachment 1)

## Fukushima Daiichi Nuclear Power Station: Plutonium analysis result in the soil

#### 1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot (): Distance from the stack of Unit 1, 2	Date of sampling/ Analyses organization	Pu-238	Pu-239, Pu-240
Playground ( west-northwest approx. 500m )		(1.6±0.14) ×10 <sup>-1</sup>	(6.7±0.85)×10 <sup>-2</sup>
Forest of wild birds ( west approx. 500m )	July 11/ Japan Chemical	(2) N.D.(< 1.0×10 <sup>-2</sup> )	N.D.(< 9.7×10 <sup>-3</sup> )
Adjacent to industrial waste disposal facility (south-southwest approx. 500m)	Analysis Center	N.D.(<1.1×10 <sup>-2</sup> )	(4.1±0.69)×10 <sup>-2</sup>
Soil in Japan •		N.D. ~ 1.5×10 <sup>-1</sup>	N.D. ~ 4.5

<sup>\*</sup> Ministry of Education, Culture, Sports, Science and Technology "Environmental Radiation Database, 1978 - 2008"

We collected samples depth direction at same point for Forest of wild birds. (In case we unable to collect samples at the same point, we will collect from new point.)

#### 2. Evaluation

Detected density of Pu-238, Pu-239 and Pu-240 on July 11 are the same level as that of the measured fallouts in Japan in the cases of previous nuclear tests in the atmosphere. However, this can be considered to be caused by the nuclear accident of this time.

Meanwhile, although Pu-238, Pu-239, and Pu-240 are detected from some of the samples taken on and after March 21, those values have not been greatly changed.

<sup>\*</sup> Avoiding duplicates, we collected samples from adjacent area for Playground and Adjacent to industrial waste disposal facility.

ORIGINAL (Attachment 1)

## Fukushima Daiichi Nuclear Power Station: Plutonium analysis result in the soil

### 1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot (): Distance from the stack of Unit 1, 2	Date of sampling/ Analyses organization	Pu-238	Pu-239, Pu-240
Playground ( west-northwest approx. 500m )		(1.6±0.14) ×10 <sup>-1</sup>	(6.7±0.85)×10 <sup>-2</sup>
Forest of wild birds ( west approx. 500m )	July 11/ Japan Chemical	N.D.(<9.7×10 <sup>-3</sup> )	N.D.(<1.0×10 <sup>-2</sup> )
Adjacent to industrial waste disposal facility (south-southwest approx. 500m)	Analysis Center	N.D.(<1.1×10 <sup>-2</sup> )	(4.1±0.69)×10 <sup>-2</sup>
Soil in Japan •		N.D. ~ 1.5×10 <sup>-1</sup>	N.D. ~ 4.5

<sup>\*</sup> Ministry of Education, Culture, Sports, Science and Technology "Environmental Radiation Database, 1978 - 2008"

We collected samples depth direction at same point for Forest of wild birds. (In case we unable to collect samples at the same point, we will collect from new point.)

#### 2. Evaluation

Detected density of Pu-238, Pu-239 and Pu-240 on July 11 are the same level as that of the measured fallouts in Japan in the cases of previous nuclear tests in the atmosphere. However, this can be considered to be caused by the nuclear accident of this time.

Meanwhile, although Pu-238, Pu-239, and Pu-240 are detected from some of the samples taken on and after March 21, those values have not been greatly changed.

<sup>\*</sup> Avoiding duplicates, we collected samples from adjacent area for Playground and Adjacent to industrial waste disposal facility.

REVISED (Attachment 3)

### Fukushima Daiichi Nuclear Power Station: Strontium analysis result in the soil

## 1. Analysis result

(Unit: Bq/kg· Dry soil)

	Sampling spot	Date of sampling/		
	(): Distance from the stack of Unit 1, 2	Analyses	Sr-89	Sr-90
		organization		
	Playground (west-northwest approx. 500m)	June 13/	$(1.1\pm0.008)\times10^3$	(3.0±0.04)×10 <sup>2</sup>
	Forest of wild birds (west approx. 500m)	Japan Chemical	(1.5±0.11)×10 <sup>1</sup>	(6.9±0.69)×10 <sup>0</sup>
(6)	Adjacent to industrial waste disposal facility (south-southwest approx. 500m)	Analysis Center	(1.1±0.008)×10 <sup>3</sup>	(3.2±0.04)×10 <sup>2</sup>
	Measured value range in the past	-	N.D. ~ 4.3	

<sup>\*</sup> Source: Environmental Radiation Measurement Result Report around Nuclear Power station, 2009 (1999 – 2008)

We collected samples depth direction at same point for Forest of wild birds. (In case we unable to collect samples at the same point, we will collect from new point.)

### 2. Evaluation

Because of the detected density of Sr-90 is higher than the measured fallouts in Japan in the cases of previous nuclear tests in the atmosphere, this can be considered to be caused by the nuclear accident of this time.

<sup>\*</sup> Avoiding duplicates, we collected samples from adjacent area for Playground and Adjacent to industrial waste disposal facility.

ORIGINAL (Attachment 3)

### Fukushima Daiichi Nuclear Power Station: Strontium analysis result in the soil

## 1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot	Date of sampling/		
(): Distance from the stack of Unit 1, 2	Analyses	Sr-89	Sr-90
	organization		
Playground (west-northwest approx. 500m)	June 13/	(1.1±0.008)×10 <sup>3</sup>	(3.0±0.04)×10 <sup>2</sup>
Forest of wild birds (west approx. 500m)	Japan Chemical	(1.5±0.11)×10 <sup>1</sup>	(6.9±0.69)×10 <sup>0</sup>
Adjacent to industrial waste disposal facility (south approx. 500m)	Analysis Center	(1.1±0.008)×10 <sup>3</sup>	(3.2±0.04)×10 <sup>2</sup>
Measured value range in the past		-	N.D. ~ 4.3

<sup>\*</sup> Source: Environmental Radiation Measurement Result Report around Nuclear Power station, 2009 (1999 – 2008)

We collected samples depth direction at same point for Forest of wild birds. (In case we unable to collect samples at the same point, we will collect from new point.)

### 2. Evaluation

Because of the detected density of Sr-90 is higher than the measured fallouts in Japan in the cases of previous nuclear tests in the atmosphere, this can be considered to be caused by the nuclear accident of this time.

<sup>\*</sup> Avoiding duplicates, we collected samples from adjacent area for Playground and Adjacent to industrial waste disposal facility.

REVISED (Attachment 3)

### Fukushima Daiichi Nuclear Power Station: Strontium analysis result in the soil

### 1. Analysis result

(Unit: Bq/kg· Dry soil)

	Sampling spot	Date of sampling/		
	(): Distance from the stack of Unit	Analyses	Sr-89	Sr-90
	1, 2	organization		
	Playground ( west-northwest		$(7.5\pm0.08) \times 10^2$	(3.2±0.04) ×10 <sup>2</sup>
	approx. 500m )			
	Forest of wild birds ( west	July 11/	(1.3±0.10) ×10 <sup>1</sup>	(3.6±0.50) ×10 <sup>0</sup>
	approx. 500m )	Japan Chemical		
(6)	Adjacent to industrial waste	Analysis Center	(9.3±0.30) ×10 <sup>1</sup>	(4.0±0.17) ×10 <sup>1</sup>
	disposal facility ( south-southwest			
	approx. 500m )			
	Soil in Japan <sup>*</sup>		-	ND ~ 4.3

- \* Ministry of Education, Culture, Sports, Science and Technology "Environmental Radiation Database, 1978 2008"
- \* Avoiding duplicates, we collected samples from adjacent area for Playground and Adjacent to industrial waste disposal facility.

We collected samples depth direction at same point for Forest of wild birds. (In case we unable to collect samples at the same point, we will collect from new point.)

#### 2. Evaluation

Because of the detected density of Sr-90 is higher than the measured fallouts in Japan in the cases of previous nuclear tests in the atmosphere, this can be considered to be caused by the nuclear accident of this time.

ORIGINAL (Attachment 3)

### Fukushima Daiichi Nuclear Power Station: Strontium analysis result in the soil

### 1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot	Date of sampling/		
(): Distance from the stack of Unit	Analyses	Sr-89	Sr-90
1, 2	organization		
Playground ( west-northwest		$(7.5\pm0.08) \times 10^2$	(3.2±0.04) ×10 <sup>2</sup>
approx. 500m)			
Forest of wild birds ( west	July 11/	(1.3±0.10) ×10 <sup>1</sup>	(3.6±0.50) ×10 <sup>0</sup>
approx. 500m)	Japan Chemical		
Adjacent to industrial waste	Analysis Center	(9.3±0.30) ×10 <sup>1</sup>	(4.0±0.17) ×10 <sup>1</sup>
disposal facility ( south approx.			
500m)			
Soil in Japan*		-	ND ~ 4.3

- \* Ministry of Education, Culture, Sports, Science and Technology "Environmental Radiation Database, 1978 2008"
- \* Avoiding duplicates, we collected samples from adjacent area for Playground and Adjacent to industrial waste disposal facility.

We collected samples depth direction at same point for Forest of wild birds. (In case we unable to collect samples at the same point, we will collect from new point.)

#### 2. Evaluation

Because of the detected density of Sr-90 is higher than the measured fallouts in Japan in the cases of previous nuclear tests in the atmosphere, this can be considered to be caused by the nuclear accident of this time.

REVISED (Attachment 3)

### Fukushima Daiichi Nuclear Power Station: Am and Cm analysis result in the soil

### 1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot  (): Distance from the stack of  Unit 1, 2	Date of sampling/ Analyses organization	Pu-238 <sup>*1</sup>	Pu-239 <sup>*1</sup> Pu-240 <sup>*1</sup>	U-234 <sup>*2</sup>	U-235 <sup>*2</sup>	U-238 <sup>*2</sup>	Am-241	Cm-242	Cm-243 Cm-244
Playground ( west-northwest	March 28/	(2.6±0.22)	(1.2±0.14)	(12±0.6)	(5.0±0.86)	(12±0.6)	(3.3±0.64)	(4.0±0.15)	(2.0±0.17)
approx. 500m)	Japan	×10 <sup>-1</sup>	×10 <sup>-1</sup>	×10 <sup>0</sup>	×10 <sup>-1</sup>	×10 <sup>0</sup>	×10 <sup>-2</sup>	×10 <sup>0</sup>	×10 <sup>-1</sup>
Adjacent to industrial waste	Chemical	(5.1±0.83)	(2.6±0.58)	(4.4±0.27)	(2.3±0.57)	(4.3±0.27)	(1.8±0.51)	(1.4±0.07)	(4.0±0.79)
disposal facility ( south-southwest	Analysis	×10 <sup>- 2</sup>	×10 <sup>- 2</sup>	(4.4±0.27) ×10 <sup>0</sup>	(2.3±0.37) ×10 <sup>-1</sup>	(4.3±0.27) ×10 <sup>0</sup>	×10 <sup>-2</sup>	×10 <sup>0</sup>	×10 <sup>-2</sup>
approx. 500m)	Center			X10	XIU	X10	<b>X</b> 10	X10	×10
Average density ratio of radioactive ma	aterials in Units	1					0.1	10	1
1-3(ratio when the ratio of Pu-238 is co	onsidered as 1)*3	l	-	-	-	-	0.1	10	1

<sup>\*1:</sup> Released on April 6<sup>th</sup>, 2011

#### 2. Evaluation

Am and Cm detected for this analysis are considered to be caused by the nuclear accident of this time for following reasons.

- Radioactive densities of Cm-242, Cm-243 and Cm-244 do not exist in the natural world. In particular, Cm-242, whose half-life is relatively short (Half-life: approximately 160 days), was detected.
- The density ratio of each radioactive material in Pu-238 sample and is almost the same as the average composition ratio of Pu-238 in Units 1-3.

Pu-238 of sample : ( Am-241/Cm-242/Cm-243, Cm-244 ) 1 : ( 0.1/15/0.8 (2) )

Pu-238 of sample : (Am-241/Cm-242/Cm-243,Cm-244) 1:(0.4/27/0.8)

<sup>\*2:</sup> Released on April 14<sup>th</sup>, 2011

<sup>\*3 :</sup> Figure by ORIGEN Code (round number)

ORIGINAL (Attachment 3)

## Fukushima Daiichi Nuclear Power Station: Am and Cm analysis result in the soil

### 1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot  (): Distance from the stack of  Unit 1, 2	Date of sampling/ Analyses organization	Pu-238 <sup>*1</sup>	Pu-239 <sup>*1</sup> Pu-240 <sup>*1</sup>	U-234 <sup>*2</sup>	U-235 <sup>*2</sup>	U-238 <sup>+2</sup>	Am-241	Cm-242	Cm-243 Cm-244
Playground ( west-northwest	March 28/	(2.6±0.22)	(1.2±0.14)	(12±0.6)	(5.0±0.86)	(12±0.6)	(3.3±0.64)	(4.0±0.15)	(2.0±0.17)
approx. 500m)	Japan	×10 <sup>-1</sup>	×10 <sup>-1</sup>	×10 <sup>0</sup>	×10 <sup>-1</sup>	×10 <sup>0</sup>	×10 <sup>-2</sup>	×10 <sup>0</sup>	×10 <sup>-1</sup>
Adjacent to industrial waste disposal facility ( south-southwest approx. 500m )	Chemical Analysis Center	(5.1±0.83) ×10 <sup>-2</sup>	(2.6±0.58) ×10 <sup>-2</sup>	(4.4±0.27) ×10 <sup>0</sup>	(2.3±0.57) ×10 <sup>-1</sup>	(4.3±0.27) ×10 <sup>0</sup>	(1.8±0.51) ×10 <sup>-2</sup>	(1.4±0.07) ×10 <sup>0</sup>	(4.0±0.79) ×10 <sup>-2</sup>
Average density ratio of radioactive materials in Unit 1-4(ratio when the ratio of Pu-238 is considered as 1		1	-	-	-	-	0.1	10	1

<sup>\*1:</sup> Released on April 6<sup>th</sup>, 2011

#### 2. Evaluation

Am and Cm detected for this analysis are considered to be caused by the nuclear accident of this time for following reasons.

- Radioactive densities of Cm-242, Cm-243 and Cm-244 do not exist in the natural world. In particular, Cm-242, whose half-life is relatively short (Half-life: approximately 160 days), was detected.
- The density ratio of each radioactive material in Pu-238 sample and is almost the same as the average composition ratio of Pu-238 in Units 1-3.

Pu-238 of sample : (Am-241/Cm-242/Cm-243,Cm-244) 1 :(0.1/15/0.7)
Pu-238 of sample : (Am-241/Cm-242/Cm-243,Cm-244) 1 :(0.4/27/0.8)

<sup>\*2:</sup> Released on April 14<sup>th</sup>, 2011

<sup>\*3 :</sup> Figure by ORIGEN Code (round number )

#### Fukushima Daiichi Nuclear Power Station: Am and Cm analysis result in the soil

## 1. Analysis result

(Unit: Bg/kg. Dry soil)

Sampling spot (): Distance from the stack of Unit 1, 2	Date of sampling/ Analyses organization	Pu-238 <sup>*1</sup>	Pu-239 <sup>*1</sup> Pu-240 <sup>*1</sup>	U-234 <sup>*2</sup>	U-235 <sup>*2</sup>	U-238 <sup>*2</sup>	Am-241	Cm-242	Cm-243 Cm-244
Playground (west-northwest approx. 500m)	June 20/	(1.2±0.12) ×10 <sup>-1</sup>	(5.8±0.77) ×10 <sup>-2</sup>	(1.1±0.058) ×10 <sup>1</sup>	(5.7±0.97) ×10 <sup>-1</sup>	(1.2±0.059) ×10 <sup>1</sup>	(2.0±0.45) ×10 <sup>-2</sup>	(1.4±0.055) ×10 <sup>0</sup>	(9.5±0.98) ×10 <sup>-2</sup>
Forest of wild birds ( west approx. 500m )	Japan Chemical	N.D. [<1.0×10 <sup>-2</sup> ]	(2.9±0.56) ×10 <sup>-2</sup>	(6.4±0.37) ×10 <sup>0</sup>	(4.0±0.79) ×10 <sup>-1</sup>	(6.2±0.35) ×10 <sup>0</sup>	N.D. [<9.7×10 <sup>-3</sup> ]	N.D. [<9.5×10 <sup>-3</sup> ]	N.D. [<9.5×10 <sup>-3</sup> ]
Adjacent to industrial waste disposal facility ( south-southwest approx. 500m )	Analysis Center	(1.7±0.15) ×10 <sup>-1</sup>	(6.1±0.81) ×10 <sup>-2</sup>	(5.7±0.33) ×10 <sup>0</sup>	(2.2±0.55) ×10 <sup>-1</sup>	(5.7±0.33) ×10 <sup>0</sup>	(5.3±0.72) ×10 <sup>-2</sup>	(2.1±0.079) ×10 <sup>0</sup>	(1.0±0.11) ×10 <sup>-1</sup>
Average nuclide density ratio of f 3 (ratio in case the ratio of Pu-23 as 1)*3		1	-	-	-	-	0.1	10	1

#### 2. Evaluation

Detected Cm is considered to derive from the accident due to following reasons.

- · Cm-242, Cm-243 and Cm-244 are nuclides that do not exist in the natural world. In particular, Cm-242 whose half-life is relatively short (approximately 160 days) was detected.
- The density ratio of each nuclides (Am-241/Cm-242/Cm-243,Cm-244) to Pu-238 in the sample and is almost the same as the average nuclide density ratio of fuel in Units 1 to 3.

Pu-238 in the sample : (Am-241/Cm-242/Cm-243,Cm-244) 1:(0.2/12/0.8(2))

Pu-238 in the sample : (Am-241/Cm-242/Cm-243, Cm-244) 1:(0.3/12/0.6)

#### Fukushima Daiichi Nuclear Power Station: Am and Cm analysis result in the soil

## 1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot (): Distance from the stack of Unit 1, 2	Date of sampling/ Analyses organization	Pu-238 <sup>*1</sup>	Pu-239 <sup>*1</sup> Pu-240 <sup>*1</sup>	U-234 <sup>*2</sup>	U-235 <sup>*2</sup>	U-238 <sup>*2</sup>	Am-241	Cm-242	Cm-243 Cm-244
Playground (west-northwest approx. 500m)	June 20/	(1.2±0.12) ×10 <sup>-1</sup>	(5.8±0.77) ×10 <sup>-2</sup>	(1.1±0.058) ×10 <sup>1</sup>	(5.7±0.97) ×10 <sup>-1</sup>	(1.2±0.059) ×10 <sup>1</sup>	(2.0±0.45) ×10 <sup>-2</sup>	(1.4±0.055) ×10 <sup>0</sup>	(9.5±0.98) ×10 <sup>-2</sup>
Forest of wild birds ( west approx. 500m )	Japan Chemical	N.D. [<1.0×10 <sup>-2</sup> ]	(2.9±0.56) ×10 <sup>-2</sup>	(6.4±0.37) ×10 <sup>0</sup>	(4.0±0.79) ×10 <sup>-1</sup>	(6.2±0.35) ×10 <sup>0</sup>	N.D. [<9.7×10 <sup>-3</sup> ]	N.D. [<9.5×10 <sup>-3</sup> ]	N.D. [<9.5×10 <sup>-3</sup> ]
Adjacent to industrial waste disposal facility ( south-southwest approx. 500m )	Analysis Center	(1.7±0.15) ×10 <sup>-1</sup>	(6.1±0.81) ×10 <sup>-2</sup>	(5.7±0.33) ×10 <sup>0</sup>	(2.2±0.55) ×10 <sup>-1</sup>	(5.7±0.33) ×10 <sup>0</sup>	(5.3±0.72) ×10 <sup>-2</sup>	(2.1±0.079) ×10 <sup>0</sup>	(1.0±0.11) ×10 <sup>-1</sup>
Average nuclide density ratio of f 3 (ratio in case the ratio of Pu-23 as 1)*3		1	-	-	-	-	0.1	10	1

<sup>\*1 :</sup> Released on July 8<sup>th</sup>, 2011

#### 2. Evaluation

Detected Cm is considered to derive from the accident due to following reasons.

- Cm-242, Cm-243 and Cm-244 are nuclides that do not exist in the natural world. In particular, Cm-242 whose half-life is relatively short (approximately 160 days) was detected.
- The density ratio of each nuclides (Am-241/Cm-242/Cm-243,Cm-244) to Pu-238 in the sample and is almost the same as the average nuclide density ratio of fuel in Units 1 to 3.

Pu-238 in the sample : (Am-241/Cm-242/Cm-243,Cm-244) 1:(0.2/12/0.6)
Pu-238 in the sample : (Am-241/Cm-242/Cm-243,Cm-244) 1:(0.3/12/0.6)

<sup>\*2:</sup> Released on July 21st, 2011

<sup>\*3 :</sup> Values calculated by ORIGEN Code (round number )



Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(6) (Unit:Bq/kg·dry soil 【JCAC】 Bq/kg·wet soil 【JAEA】 )

	Sampling spot	【Fixed point①】* Playground (west-northwest		*2	[Fixed point②]*1 Forest of wild birds (west approx. 500m)*2  (		[Fixed point3] Adjacent to indudisposal facility (south-southwe 500m)*2	ustrial waste	④Front of administration Building of Unit 5/6 (north approx. 1,000m)*2	⑤Adjacent to solid waste storage 1/2 (north approx. 500m) *2	©south- southwest approx. 500m*2	①south- southwest approx. 750m*2	®south- southwest approx. 1,000m*2
	Date of sampling	3/21	3/25	3/28	3/25		3/25		3/25	3/22	3/22	3/22	3/22
	Analytical body	JAEA	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	JAEA	JAEA	JAEA	JAEA
	Date of analysis	3/24	3/28	3/30	3/28	3/30	3/28	3/30	3/28	3/25	3/25	3/24	3/25
Nuclide	I-131(approx. 8 days)	5.8E+06	5.7E+06	3.8E+06	3.0E+06	3.9E+04	1.2E+07	2.6E+06	4.6E+05	3.1E+06	7.9E+05	2.2E+06	5.4E+06
	I-132(approx. 2 hours)	*4	*4	2.3E+05	*4	1.3E+02	*4	1.5E+05	*4	*4	*4	*4	*4
	Cs-134(approx. 2 years)	3.4E+05	4.9E+05	5.3E+05	7.7E+04	3.2E+02	3.5E+06	9.7E+05	6.8E+04	9.5E+05	8.7E+03	1.7E+04	1.6E+05
	Cs-136(approx. 13 days)	7.2E+04	6.1E+04	3.3E+04	1.0E+04	2.8E+01	4.6E+05	6.9E+04	8.6E+03	1.1E+05	1.9E+03	2.2E+03	2.5E+04
	Cs-137(approx. 30 years)	3.4E+05	4.8E+05	5.1E+05	7.6E+04	3.2E+02	3.5E+06	9.3E+05	6.7E+04	1.0E+06	2.0E+04	1.6E+04	1.6E+05
	Te-129m(approx. 34 days)	2.5E+05	2.9E+05	8.5E+05	5.3E+04	ND	2.7E+06	6.0E+05	2.8E+04	8.9E+05	9.5E+03	1.9E+04	1.7E+05
	Te-132(approx. 3 days)	6.1E+05	3.4E+05	3.0E+05	6.5E+04	1.4E+02	3.1E+06	2.0E+05	3.2E+04	1.9E+06	2.1E+04	3.9E+04	3.8E+05
	Ba-140(approx. 13 days)	1.3E+04	1.5E+04	ND	2.5E+03	ND	ND	ND	ND	8.0E+04	ND	ND	ND
	Nb-95(approx. 35 days)	1.7E+03	2.4E+03	ND	ND	ND	5.3E+03	ND	ND	8.1E+03	ND	ND	7.9E+02
	Ru-106(approx. 370 days)	5.3E+04	ND	ND	6.4E+03	ND	2.7E+05	ND	ND	6.8E+04	1.9E+03	ND	3.2E+04
	Mo-99(approx. 66 hours)	2.1E+04	ND	ND	ND	ND	6.6E+04	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	2.3E+04	2.0E+04	ND	ND	ND	4.5E+04	ND	1.8E+03	2.3E+04	ND	ND	8.3E+03
	La-140(approx. 2 days)	3.3E+04	3.7E+04	ND	2.3E+03	ND	9.7E+04	ND	2.5E+03	2.1E+05	4.2E+02	6.2E+02	7.8E+03
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND	ND	ND	3.2E+04	ND	ND	ND
	Ag-110m(approx. 250 days)	1.1E+03	2.6E+03	ND	ND	ND	ND	ND	1.7E+02	1.8E+04	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1/2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

<sup>\*4</sup> Regarding parent nuclide and daughter nuclides forming radiative balance, radioactive concentrations of both are checked. When they are similar (the difference is within one order of magnitude), both are described in the table. In case that the daughter nuclide (esp. short half-life nuclide) is much larger than the parent nuclide (more than 2 orders of magnitude), the parent nuclide is stated in the table. I-132 is evaluated by their parent nuclide Te-132.)



Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

												(unit:	Bq/kg•dry soil)
	Sampling spot	【Fixed point①】 Playground (west-northwes	*1 st approx. 500m		[Fixed point②] Forest of wild b (west approx. 5	irds	Adjacent to indudisposal facility	(south-southwest approx.		⑤Adjacent to solid waste storage 1/2 (north approx. 500m)*2	©south- southwest approx. 500m*2		®south- southwest approx. 1,000m*2
	Date of sampling	3/21	3/25		3/25		3/25		3/25	3/22	3/22	3/22	3/22
	Analytical body	JAEA	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	JAEA	JAEA	JAEA	JAEA
	Date of analysis	3/24	3/28	3/30	3/28	3/30	3/28	3/30	3/28	3/25	3/25	3/24	3/25
Nuclide	I-131(approx. 8 days)	5.8E+06	5.7E+06	3.8E+06	3.0E+06	3.9E+04	1.2E+07	2.6E+06	4.6E+05	3.1E+06	7.9E+05	2.2E+06	5.4E+06
	I-132(approx. 2 hours)	*4	*4	2.3E+05	*4	1.3E+02	*4	1.5E+05	*4	*4	*4	*4	*4
	Cs-134(approx. 2 years)	3.4E+05	4.9E+05	5.3E+05	7.7E+04	3.2E+02	3.5E+06	9.7E+05	6.8E+04	9.5E+05	8.7E+03	1.7E+04	1.6E+05
	Cs-136(approx. 13 days)	7.2E+04	6.1E+04	3.3E+04	1.0E+04	2.8E+01	4.6E+05	6.9E+04	8.6E+03	1.1E+05	1.9E+03	2.2E+03	2.5E+04
	Cs-137(approx. 30 years)	3.4E+05	4.8E+05	5.1E+05	7.6E+04	3.2E+02	3.5E+06	9.3E+05	6.7E+04	1.0E+06	2.0E+04	1.6E+04	1.6E+05
	Te-129m(approx. 34 days)	2.5E+05	2.9E+05	8.5E+05	5.3E+04	ND	2.7E+06	6.0E+05	2.8E+04	8.9E+05	9.5E+03	1.9E+04	1.7E+05
	Te-132(approx. 3 days)	6.1E+05	3.4E+05	3.0E+05	6.5E+04	1.4E+02	3.1E+06	2.0E+05	3.2E+04	1.9E+06	2.1E+04	3.9E+04	3.8E+05
	Ba-140(approx. 13 days)	1.3E+04	1.5E+04	ND	2.5E+03	ND	ND	ND	ND	8.0E+04	ND	ND	ND
	Nb-95(approx. 35 days)	1.7E+03	2.4E+03	ND	ND	ND	5.3E+03	ND	ND	8.1E+03	ND	ND	7.9E+02
	Ru-106(approx. 370 days)	5.3E+04	ND	ND	6.4E+03	ND	2.7E+05	ND	ND	6.8E+04	1.9E+03	ND	3.2E+04
	Mo-99(approx. 66 hours)	2.1E+04	ND	ND	ND	ND	6.6E+04	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	2.3E+04	2.0E+04	ND	ND	ND	4.5E+04	ND	1.8E+03	2.3E+04	ND	ND	8.3E+03
	La-140(approx. 2 days)	3.3E+04	3.7E+04	ND	2.3E+03	ND	9.7E+04	ND	2.5E+03	2.1E+05	4.2E+02	6.2E+02	7.8E+03
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND	ND	ND	3.2E+04	ND	ND	ND
	Ag-110m(approx. 250 days)	1.1E+03	2.6E+03	ND	ND	ND	ND	ND	1.7E+02	1.8E+04	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1/2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

<sup>\*4</sup> Regarding parent nuclide and daughter nuclides forming radiative balance, radioactive concentrations of both are checked. When they are similar (the difference is within one order of magnitude), both are described in the table. In case that the daughter nuclide (esp. short half-life nuclide) is much larger than the parent nuclide (more than 2 orders of magnitude), the parent nuclide is stated in the table. I-132 is evaluated by their parent nuclide Te-132.)

REVISED (Attachment 2)

Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(6) (Unit:Bq/kg·dry soil [JCAC] Bq/kg·wet soil [JAEA] )

						Dq/ Ng WCC 3011	
	Sampling spot	[Fixed point①] Playground (west-northwesting) 500m)*2		[Fixed point②] Forest of wild b (west approx. 5	irds	[Fixed point③]* Adjacent to industisposal facility (south-southwest	
	Date of sampling	3/31	4/4	3/31	4/4	3/31	4/4
	Analytical body	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3
	Date of analysis	4/1	4/6	4/1	4/6	4/1	4/6
Nuclide	I-131(approx. 8 days)	2.6E+06	8.1E+05	9.5E+03	1.4E+04	5.9E+06	1.6E+06
	I-132(approx. 2 hours)	*4	2.8E+04	*4	2.9E+01	*4	5.2E+04
	Cs-134(approx. 2 years)	5.0E+05	3.8E+05	1.2E+03	6.7E+02	3.8E+06	8.1E+05
	Cs-136(approx. 13 days)	4.6E+04	2.0E+04	1.2E+02	3.7E+01	3.7E+05	4.3E+04
	Cs-137(approx. 30 years)	4.9E+05	3.8E+05	1.2E+03	6.7E+02	3.8E+06	7.9E+05
	Te-129m(approx. 34 days)	3.2E+05	4.0E+05	ND	4.2E+02	2.2E+06	7.0E+05
	Te-132(approx. 3 days)	1.2E+05	3.6E+04	2.7E+02	3.2E+01	8.4E+05	6.6E+04
	Ba-140(approx. 13 days)	1.0E+04	ND	ND	ND	3.3E+04	ND
	Nb-95(approx. 35 days)	ND	ND	ND	ND	ND	ND
	Ru-106(approx. 370 days)	2.1E+04	ND	ND	ND	6.1E+04	ND
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	1.1E+04	ND
	La-140(approx. 2 days)	1.3E+04	ND	ND	ND	4.7E+04	ND
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND
	Ag-110m(approx. 250 days)	3.2E+03	ND	ND	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

<sup>\*4</sup> Regarding parent nuclide and daughter nuclides forming radiative balance, radioactive concentrations of both are checked. When they are similar (the difference is within one order of magnitude), both are described in the table. In case that the daughter nuclide (esp. short half-life nuclide) is much larger than the parent nuclide (more than 2 orders of magnitude), the parent nuclide is stated in the table. I-132 is evaluated by their parent nuclide Te-132.)

(Attachment 2)



Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

							(unit: Ba/ka•drv soil)	
	Sampling spot	[Fixed point]] Playground (west-northwest) 500m)*2		[Fixed point②] Forest of wild b (west approx. 5	irds	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2		
	Date of sampling	3/31	4/4	3/31	4/4	3/3		
	Analytical body	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	
	Date of analysis	4/1	4/6	4/1	4/6	4/	1 4/6	
Nuclide	I-131(approx. 8 days)	2.6E+06	8.1E+05	9.5E+03	1.4E+04	5.9E+0	1.6E+06	
	I-132(approx. 2 hours)	*4	2.8E+04	*4	2.9E+01	*	5.2E+04	
	Cs-134(approx. 2 years)	5.0E+05	3.8E+05	1.2E+03	6.7E+02	3.8E+0	8.1E+05	
	Cs-136(approx. 13 days)	4.6E+04	2.0E+04	1.2E+02	3.7E+01	3.7E+0	5 4.3E+04	
	Cs-137(approx. 30 years)	4.9E+05	3.8E+05	1.2E+03	6.7E+02	3.8E+0	6 7.9E+05	
	Te-129m(approx. 34 days)	3.2E+05	4.0E+05	ND	4.2E+02	2.2E+0	7.0E+05	
	Te-132(approx. 3 days)	1.2E+05	3.6E+04	2.7E+02	3.2E+01	8.4E+0	6.6E+04	
	Ba-140(approx. 13 days)	1.0E+04	ND	ND	ND	3.3E+0	4 ND	
	Nb-95(approx. 35 days)	ND	ND	ND	ND	NI	) ND	
	Ru-106(approx. 370 days)	2.1E+04	ND	ND	ND	6.1E+0	4 ND	
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	NI	) ND	
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	1.1E+0	4 ND	
	La-140(approx. 2 days)	1.3E+04	ND	ND	ND	4.7E+0	4 ND	
	Be-7(approx. 53 days)	ND	ND	ND	ND	NI	) ND	
	Ag-110m(approx. 250 days)	3.2E+03	ND	ND	ND	NI	) ND	

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

<sup>\*4</sup> Regarding parent nuclide and daughter nuclides forming radiative balance, radioactive concentrations of both are checked. When they are similar (the difference is within one order of magnitude), both are described in the table. In case that the daughter nuclide (esp. short half-life nuclide) is much larger than the parent nuclide (more than 2 orders of magnitude), the parent nuclide is stated in the table. I-132 is evaluated by their parent nuclide Te-132.)

## **REVISED**

Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(6) (Unit:Bq/kg·dry soil [JCAC]
Bq/kg·wet soil [JAEA] )

	Sampling spot			(west approx. 500m)*2		[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2	
	Date of sampling	4/7	4/11	4/7	4/11	4/7	4/11
	Analytical body	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3
	Date of analysis	4/11	4/13	4/11	4/13	4/11	4/13
Nuclide	I-131(approx. 8 days)	7.4E+05	3.0E+05	1.6E+04	1.2E+04	2.3E+06	1.1E+06
	I-132(approx. 2 hours)	*4	1.1E+03	<sup>(2)</sup> ND	ND	*4	1.0E+04
	Cs-134(approx. 2 years)	3.4E+05	1.4E+05	7.5E+02	6.5E+02	2.0E+06	2.3E+06
	Cs-136(approx. 13 days)	2.3E+04	5.7E+03	6.9E+01	2.5E+01	1.5E+05	7.9E+04
	Cs-137(approx. 30 years)	3.4E+05	1.4E+05	7.4E+02	6.8E+02	2.1E+06	2.2E+06
	Te-129m(approx. 34 days)	3.1E+05	6.6E+04	ND	3.4E+02	1.3E+06	1.1E+06
	Te-132(approx. 3 days)	2.6E+04	1.4E+03	ND	ND	1.1E+05	2.3E+04
	Ba-140(approx. 13 days)	3.1E+03	ND	ND	ND	ND	ND
	Nb-95(approx. 35 days)	1.2E+03	ND	ND	ND	4.5E+03	ND
	Ru-106(approx. 370 days)	ND	ND	ND	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	ND	ND
	La-140(approx. 2 days)	*4	ND	ND	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND
	Ag-110m(approx. 250 days)	<sup>(2)</sup> ND	ND	ND	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

<sup>\*4</sup> Regarding parent nuclide and daughter nuclides forming radiative balance, radioactive concentrations of both are checked. When they are similar (the difference is within one order of magnitude), both are describe in the table. In case that the daughter nuclide (esp. short half-life nuclide) is much larger than the parent nuclide (more than 2 orders of magnitude), the parent nuclide is stated in the table. I-132 and La-140 are evaluated by their parent nuclides Te-132 and Ba-140 respectively.)

ORIGINAL (Attachment 2)

#### Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

< Results of the soil analysis in Fukushima Prefecture conducted in FY 2009:

							(unit: Bq/kg•dry soil)	
	Sampling spot	Playground	(west-northwest approx.		【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2		[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2	
	Date of sampling	4/7	4/11	4/7	4/11	4/7	4/11	
	Analytical body	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	
	Date of analysis	4/11	4/13	4/11	4/13	4/11	4/13	
Nuclide	I-131(approx. 8 days)	7.4E+05	3.0E+05	1.6E+04	1.2E+04	2.3E+06	1.1E+06	
	I-132(approx. 2 hours)	*4	1.1E+03	*4	ND	*4	1.0E+04	
	Cs-134(approx. 2 years)	3.4E+05	1.4E+05	7.5E+02	6.5E+02	2.0E+06	2.3E+06	
	Cs-136(approx. 13 days)	2.3E+04	5.7E+03	6.9E+01	2.5E+01	1.5E+05	7.9E+04	
	Cs-137(approx. 30 years)	3.4E+05	1.4E+05	7.4E+02	6.8E+02	2.1E+06	2.2E+06	
	Te-129m(approx. 34 days)	3.1E+05	6.6E+04	ND	3.4E+02	1.3E+06	1.1E+06	
	Te-132(approx. 3 days)	2.6E+04	1.4E+03	ND	ND	1.1E+05	2.3E+04	
	Ba-140(approx. 13 days)	3.1E+03	ND	ND	ND	ND	ND	
	Nb-95(approx. 35 days)	1.2E+03	ND	ND	ND	4.5E+03	ND	
	Ru-106(approx. 370 days)	ND	ND	ND	ND	ND	ND	
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND	
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	ND	ND	
	La-140(approx. 2 days)	*4	ND	ND	ND	ND	ND	
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND	
	Ag-110m(approx. 250 days	3.2E+03	ND	ND	ND	ND	ND	

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

<sup>\*4</sup> Regarding parent nuclide and daughter nuclides forming radiative balance, radioactive concentrations of both are checked. When they are similar (the difference is within one order of magnitude), both a described in the table. In case that the daughter nuclide (esp. short half-life nuclide) is much larger than the parent nuclide (more than 2 orders of magnitude), the parent nuclide is stated in the table. I-132 and La-140 are evaluated by their parent nuclides Te-132 and Ba-140 respectively.)

# REVISED

## Result of gamma ray nuclide analysis of soil

#### 1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

#### 2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

_				(6) (Unit:Bq/kg•dry soil)	
	Sampling spot	[Fixed point①]*1 Playground (west-northwest approx. 500m) *2	[Fixed point②]*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2	
	Date of sampling	4/25	4/25	4/25	
	Analytical body	apan Chemical Analysis Cente	apan Chemical Analysis Cente	Japan Chemical Analysis Center	
	Date of analysis	4/27	4/27	4/27	
Nuclide	I-131(approx. 8 days)	1.8E+05	1.1E+04	1.1E+05	
	I-132(approx. 2 hours)	ND	ND	ND	
	Cs-134(approx. 2 years)	4.0E+05	4.9E+03	1.5E+05	
	Cs-136(approx. 13 days)	6.7E+03	8.8E+01	2.5E+03	
	Cs-137(approx. 30 years)	3.9E+05	5.1E+03	1.5E+05	
	Te-129m(approx. 34 days)	1.1E+05	1.4E+03	8.3E+04	
	Te-132(approx. 3 days)	ND	ND	ND	
	Ba-140(approx. 13 days)	ND	ND	ND	
	Nb-95(approx. 35 days)	ND	ND	ND	
	Ru-106(approx. 370 days)	ND	ND	ND	
	Mo-99(approx. 66 hours)	ND	ND	ND	
	Tc-99m(approx. 6 hours)	ND	ND	ND	
	La-140(approx. 2 days)	ND	ND	ND	
	Be-7(approx. 53 days)	ND	ND	ND	
	Ag-110m(approx. 250 days)	ND	ND	ND	

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2



## Result of gamma ray nuclide analysis of soil

#### 1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

#### 2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(6) (Unit:Bg/kg•wet soil) [Fixed point1]\*1 [Fixed point3]\*1 [Fixed point2]\*1 Playground Adjacent to industrial waste Sampling spot Forest of wild birds disposal facility (west-northwest approx. 500m) (west approx. 500m)\*2 (south-southwest approx. 500m)\*2 Date of sampling 4/25 4/25 4/25 Analytical body Japan Chemical Analysis Center Japan Chemical Analysis Center Japan Chemical Analysis Center Date of analysis 4/27 4/27 4/27 Nuclide I-131(approx. 8 days) 1.8E+05 1.1E+04 1.1E+05 ND ND ND I-132(approx. 2 hours) 4.0E+05 Cs-134(approx. 2 years) 4.9E+03 1.5E+05 Cs-136(approx. 13 days) 6.7E+03 8.8E+01 2.5E+03 Cs-137(approx. 30 years) 3.9E+05 5.1E+03 1.5E+05 Te-129m(approx. 34 days) 1.1E+05 1.4E+03 8.3E+04 Te-132(approx. 3 days) ND ND ND ND ND Ba-140(approx. 13 days) ND ND ND ND Nb-95(approx. 35 days) Ru-106(approx. 370 days) ND ND ND Mo-99(approx. 66 hours) ND ND ND ND ND ND Tc-99m(approx. 6 hours) La-140(approx. 2 days) ND ND ND Be-7(approx. 53 days) ND ND ND Ag-110m(approx. 250 days) ND ND ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

# **REVISED**

## Result of gamma ray nuclide analysis of soil

#### 1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

#### 2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(Unit: Bg/kg • wet soil)

	Sampling spot	[Fixed point①]*1 Playground (west-northwest approx. 500m) *2	[Fixed point②]*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	4/28	4/28	4/28
	Analytical body	Japan Atomic Energy Agency	Japan Atomic Energy Agency	Japan Atomic Energy Agency
	Date of analysis	5/6	(2) 5/6	5/6
Nuclide	I-131(approx. 8 days)	2.6E+05	7.0E+03	(2) 2.0E+05
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	5.3E+05	4.9E+03	6.2E+05
	Cs-136(approx. 13 days)	1.1E+04	1.2E+02	1.4E+04
	Cs-137(approx. 30 years)	5.4E+05	4.9E+03	6.4E+05
	Te-129m(approx. 34 days)	1.7E+05	ND	2.5E+05
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	9.1E+02	ND	1.2E+03
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	2.7E+03	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2



#### Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(Unit: Bq/kg·wet soil)

	Sampling spot	[Fixed point①]*1 Playground (west-northwest approx. 500m)*2	[Fixed point②]*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	4/28	4/28	4/28
	Analytical body	Japan Atomic Energy Agency	Japan Atomic Energy Agency	Japan Atomic Energy Agency
	Date of analysis	5/6	5/6	5/6
Nuclide	I-131(approx. 8 days)	2.6E+05	7.0E+03	2.2E+05
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	5.3E+05	4.9E+03	6.2E+05
	Cs-136(approx. 13 days)	1.1E+04	1.2E+02	1.4E+04
	Cs-137(approx. 30 years)	5.4E+05	4.9E+03	6.4E+05
	Te-129m(approx. 34 days)	1.7E+05	ND	2.5E+05
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	9.1E+02	ND	1.2E+03
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	2.7E+03	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

REVISED (Attachment 2)

#### Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(6) (Unit:Bq/kg·dry soil 【JCAC】 Bq/kg·wet soil【JAEA】 )

Sampling spot		【Fixed point①】*1 Playground (west-northwest approx. 500m)*2		[Fixed point(2)]*1 Forest of wild birds (west approx. 500m)*2		[Fixed point(3)]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2	
Date of s	ampling	May 02, 2011	May 05, 2011	May 02, 2011	May 05, 2011	May 02, 2011	May 05, 2011
Analytica	I body	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA
Date of a	nalysis	5/3	5/6	5/3	5/6	5/3	5/6
Nuclide	I-131(approx. 8 days)	6.7E+04	1.7E+05	2.7E+04	3.5E+04	1.0E+05	2.7E+05
	I-132(approx. 2 hours)	ND	ND	ND	ND	ND	ND
	Cs-134(approx. 2 years)	1.9E+05	5.3E+05	4.5E+03	1.3E+04	3.3E+05	2.2E+06
	Cs-136(approx. 13 days)	2.3E+03	7.4E+03	ND	2.3E+02	4.0E+03	3.5E+04
	Cs-137(approx. 30 years)	1.7E+05	5.5E+05	4.5E+03	1.4E+04	3.2E+05	2.3E+06
	Te-129m(approx. 34 days)	ND	1.6E+05	2.5E+03	5.2E+03	1.3E+05	7.5E+05
	Te-132(approx. 3 days)	ND	ND	ND	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND	ND	ND	ND
	Nb-95(approx. 35 days)	ND	1.5E+03	ND	ND	ND	3.0E+03
	Ru-106(approx. 370 days)	ND	ND	ND	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	3.0E+03	ND	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

<sup>\*4</sup> Regarding parent nuclide and daughter nuclides forming radiative balance, radioactive concentrations of both are checked. When they are similar (the difference is within one order of magnitude), both are described in the table. In case that the daughter nuclide (esp. short half-life nuclide) is much larger than the parent nuclide (more than 2 orders of magnitude), the parent nuclide is stated in the table. I-132 and La-140 are evaluated by their parent nuclides Te-132 and Ba-140 respectively.)

ORIGINAL

(Attachment 2)

Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009:

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(Unit:Ba/ka•drv soil)

							(Unit. bq/kg-ury soil)
Sampling spot		【Fixed point①】*1 Playground (west-northwest approx. 500m) *2		[Fixed point(2)]*1 Forest of wild birds (west approx. 500m)*2		[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2	
Date of	sampling	May 02, 2011	May 05, 2011	May 02, 2011	May 05, 2011	May 02, 2011	May 05, 2011
Analytic	al body	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA
Date of	analysis	5/3	5/6	5/3	5/6	5/3	5/6
Nuclide	I-131(approx. 8 days)	6.7E+04	1.7E+05	2.7E+04	3.5E+04	1.0E+05	2.7E+05
	I-132(approx. 2 hours)	ND	ND	ND	ND	ND	ND
	Cs-134(approx. 2 years)	1.9E+05	5.3E+05	4.5E+03	1.3E+04	3.3E+05	2.2E+06
	Cs-136(approx. 13 days)	2.3E+03	7.4E+03	ND	2.3E+02	4.0E+03	3.5E+04
	Cs-137(approx. 30 years)	1.7E+05	5.5E+05	4.5E+03	1.4E+04	3.2E+05	2.3E+06
	Te-129m(approx. 34 days)	ND	1.6E+05	2.5E+03	5.2E+03	1.3E+05	7.5E+05
	Te-132(approx. 3 days)	ND	ND	ND	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND	ND	ND	ND
	Nb-95(approx. 35 days)	ND	1.5E+03	ND	ND	ND	3.0E+03
	Ru-106(approx. 370 days)	ND	ND	ND	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	3.0E+03	ND	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

<sup>\*4</sup> Regarding parent nuclide and daughter nuclides forming radiative balance, radioactive concentrations of both are checked. When they are similar (the difference is within one order of magnitude), both are described in the table. In case that the daughter nuclide (esp. short half-life nuclide) is much larger than the parent nuclide (more than 2 orders of magnitude), the parent nuclide is stated in the table. I-132 and La-140 are evaluated by their parent nuclides Te-132 and Ba-140 respectively.)

REVISED

(Attachment 2)

Result of gamma ray nuclide analysis of soil

1 Result of measurement

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

Evaluation

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

Results of the soil analysis in Fukushima Prefecture conducted in FY 2009> Cs-137: ND~21Bq/kg·dry soil, Others: ND

> (6) (Unit:Bq/kg•dry soil 【JCAC】 Bq/kg•wet soil 【JAEA】

	Sampling spot	[Fixed point⊕]*1 Playground (west-northwest approx. 500m)  *2		[Fixed point②]*1 Forest of wild birds (west approx. 500m)*2		[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)	
	Date of sampling	5/9	5/12	5/9	5/12	5/9	5/12
	Analytical body	JCAC *3	JAEA	JCAC *3	JAEA	JCAC *3	JAEA
	Date of analysis	5/11	5/13	5/11	5/13	5/11	5/13
Nuclide	I-131(approx. 8 days)	9.4E+04	9.4E+04	2.0E+04	9.9E+03	9.1E+04	1.1E+05
	I-132(approx. 2 hours)	ND	ND	ND	ND	ND	ND
	Cs-134(approx. 2 years)	5.0E+05	5.0E+05	3.8E+04	1.4E+04	1.1E+05	1.4E+06
	Cs-136(approx. 13 days)	5.3E+03	5.4E+03	5.7E+02	1.9E+02	8.6E+03	1.5E+04
	Cs-137(approx. 30 years)	5.0E+05	5.2E+05	4.0E+04	1.5E+04	1.1E+06	1.4E+06
	Te-129m(approx. 34 days)	1.2E+05	1.3E+05	7.0E+04	3.9E+03	2.7E+05	4.3E+05
	Te-132(approx. 3 days)	ND	ND	ND	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND	ND	ND	ND
	Nb-95(approx. 35 days)	ND	1.3E+03	ND	ND	ND	1.2E+03
	Ru-106(approx. 370 days)	ND	ND	ND	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	ND	ND	ND	ND	3.3E+03

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

<sup>\*4</sup> Regarding parent nuclide and daughter nuclides forming radiative balance, radioactive concentrations of both are checked. When they are similar (the difference is within one order of magnitude), both are described in the table. In case that the daughter nuclide (esp. short half-life nuclide) is much larger than the parent nuclide (more than 2 orders of magnitude), the parent nuclide is stated in the table. I-132 and La-140 are evaluated by their parent nuclides Te-132 and Ba-140 respectively.)

ORIGINAL

(Attachment 2)

Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

						(Un	it:Bq/kg•dry soil)
	Sampling spot	[Fixed point①]*1 Playground (west-northwest approx. 500m) *2		[Fixed point2]*1 Forest of wild birds (west approx. 500m)*2		[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)	
	Date of sampling	5/9	5/12	5/9	5/12	5/9	5/12
	Analytical body	JCAC *3	JAEA	JCAC *3	JAEA	JCAC *3	JAEA
	Date of analysis	5/11	5/13	5/11	5/13	5/11	5/13
Nuclide	I-131(approx. 8 days)	9.4E+04	9.4E+04	2.0E+04	9.9E+03	9.1E+04	1.1E+05
	I-132(approx. 2 hours)	ND	ND	ND	ND	ND	ND
	Cs-134(approx. 2 years)	5.0E+05	5.0E+05	3.8E+04	1.4E+04	1.1E+05	1.4E+06
	Cs-136(approx. 13 days)	5.3E+03	5.4E+03	5.7E+02	1.9E+02	8.6E+03	1.5E+04
	Cs-137(approx. 30 years)	5.0E+05	5.2E+05	4.0E+04	1.5E+04	1.1E+06	1.4E+06
	Te-129m(approx. 34 days)	1.2E+05	1.3E+05	7.0E+04	3.9E+03	2.7E+05	4.3E+05
	Te-132(approx. 3 days)	ND	ND	ND	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND	ND	ND	ND
	Nb-95(approx. 35 days)	ND	1.3E+03	ND	ND	ND	1.2E+03
	Ru-106(approx. 370 days)	ND	ND	ND	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	ND	ND	ND	ND	3.3E+03

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wild birds", sampling was conducted on the same sampling point but in deeper direction.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

<sup>\*4</sup> Regarding parent nuclide and daughter nuclides forming radiative balance, radioactive concentrations of both are checked. When they are similar (the difference is within one order of magnitude), both are described in the table. In case that the daughter nuclide (esp. short half-life nuclide) is much larger than the parent nuclide (more than 2 orders of magnitude), the parent nuclide is stated in the table. I-132 and La-140 are evaluated by their parent nuclides Te-132 and Ba-140 respectively.)

## **REVISED**

Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(6) (Unit:Bq/kg·dry soil 【JCAC】 Bq/kg·wet soil【JAEA】

	[Fixed point①]*1 Sampling spot Playground (west-northwest approx. 500m)*2			[Fixed point(2)]*1 Forest of wild birds (west approx. 500m)*2			[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2			
	Date of sampling 5/16 5/19 5/23			5/16	5/19	5/23	5/16	5/19	5/23	
	Analytical body	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3
	Date of analysis	5/25	5/24	5/25	5/25	5/24	5/25	5/25	5/24	5/25
Nuclide	I-131(approx. 8 days)	2.6E+04	1.9E+04	3.4E+04	1.9E+03	2.3E+02	6.8E+02	3.2E+04	3.9E+04	3.6E+04
	I-132(approx. 2 hours)	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cs-134(approx. 2 years)	4.9E+05	1.6E+05	5.8E+05	7.4E+03	3.9E+02	3.1E+03	7.8E+05	9.4E+05	1.4E+06
	Cs-136(approx. 13 days)	2.2E+03	1.2E+03	2.6E+03	ND	ND	ND	3.2E+03	7.4E+03	5.6E+03
	Cs-137(approx. 30 years)	4.9E+05	1.7E+05	5.8E+05	8.0E+03	4.2E+02	3.4E+03	7.9E+05	9.8E+05	1.4E+06
	Te-129m(approx. 34 days)	1.4E+05	4.2E+04	1.1E+05	1.2E+03	ND	8.8E+02	1.9E+05	2.9E+05	3.7E+05
	Te-132(approx. 3 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nb-95(approx. 35 days)	ND	4.3E+02	ND	ND	ND	ND	ND	1.2E+03	ND
	Ru-106(approx. 370 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	ND	ND	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

## **ORIGINAL**

Result of gamma ray nuclide analysis of soil

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(Unit:Bg/kg•dry soil) [Fixed point(1)]\*1 [Fixed point2]\*1 [Fixed point3]\*1 Sampling spot Playground Forest of wild birds Adjacent to industrial waste disposal facility (west-northwest approx. 500m)\*2 (west approx. 500m)\*2 (south-southwest approx. 500m)\*2 Date of sampling 5/16 5/19 5/23 5/16 5/23 5/16 5/19 5/23 Japan Chemical Japan Chemical Japan Chemical Japan Chemical Japan Chemical Japan Chemical JAEA JAEA JAEA Analytical body Analysis Center\*3 Analysis Center\*3 Analysis Center\*3 Analysis Center\*3 Analysis Center\*3 Analysis Center\*3 Date of analysis 5/25 5/24 5/25 5/24 5/25 5/24 5/25 Nuclide I-131(approx. 8 days) 2.6E+04 1.9E+04 3.4E+04 1.9E+03 2.3E+02 6.8E+02 3.2E+04 3.9E+04 3.6E+04 ND ND ND ND ND ND ND ND ND I-132(approx. 2 hours) 4.9E+05 5.8E+05 7.8E+05 9.4E+05 Cs-134(approx. 2 years) 1.6E+05 7.4E+03 3.9E+02 3.1E+03 1.4E+06 Cs-136(approx. 13 days) 2.2E+03 1.2E+03 2.6E+03 ND ND ND 3.2E+03 7.4E+03 5.6E+03 Cs-137(approx. 30 years) 4.9E+05 1.7E+05 5.8E+05 8.0E+03 4.2E+02 3.4E+03 7.9E+05 9.8E+05 1.4E+06 1.4E+05 1.1E+05 1.2E+03 ND 8.8E+02 1.9E+05 2.9E+05 3.7E+05 Te-129m(approx. 34 days 4.2E+04 ND ND ND ND ND ND ND ND ND Te-132(approx. 3 days) Ba-140(approx. 13 days) ND Nb-95(approx. 35 days) ND 4.3E+02 ND ND ND ND 1.2E+03 ND ND ND ND ND ND ND Ru-106(approx. 370 days) ND Mo-99(approx. 66 hours) Tc-99m(approx. 6 hours) ND ND ND ND ND ND ND ND ND La-140(approx. 2 days) ND Be-7(approx. 53 days) ND ND ND ND Ag-110m(approx. 250 day ND ND ND ND ND ND ND ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap.

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.



1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				(6) (Unit:Bq/kg•wet soil)	
	Sampling spot	【Fixed point①】*1 Playground (west-northwest approx. 500m)*2	【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2	<pre>[Fixed point③]*1 Adjacent to industrial waste disposal facility   (south-southwest approx. 500m)*2</pre>	
	Date of sampling	5/26	5/26	5/26	
	Analytical body	JAEA	JAEA	JAEA	
	Date of analysis	5/30	5/30	5/30	
Nuclide	I-131(approx. 8 days)	2.6E+04	4.8E+02	2.9E+04	
	I-132(approx. 2 hours)	ND	ND	ND	
	Cs-134(approx. 2 years)	4.9E+05	1.3E+03	1.2E+06	
	Cs-136(approx. 13 days)	2.6E+03	ND	7.3E+03	
	Cs-137(approx. 30 years)	5.1E+05	1.3E+03	1.3E+06	
	Te-129m(approx. 34 days)	1.2E+05	ND	2.3E+05	
	Te-132(approx. 3 days)	ND	ND	ND	
	Ba-140(approx. 13 days)	ND	ND	ND	
	Nb-95(approx. 35 days)	5.0E+02	ND	1.4E+03	
	Ru-106(approx. 370 days)	ND	ND	ND	
	Mo-99(approx. 66 hours)	ND	ND	ND	
	Tc-99m(approx. 6 hours)	ND	ND	ND	
	La-140(approx. 2 days)	ND	ND	ND	
	Be-7(approx. 53 days)	ND	ND	ND	
	Ag-110m(approx. 250 days)	2.4E+03	ND	ND	

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap.

<sup>\*2</sup> Distance from the stack of Unit 1, 2



1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				<sup>(6)</sup> (Unit∶Bq/kg• soil)
	Sampling spot	【Fixed point①】*1 Playground (west-northwest approx. 500m)*2	【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2	【Fixed point③】*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	5/26	5/26	5/26
	Analytical body	JAEA	JAEA	JAEA
	Date of analysis	5/30	5/30	5/30
Nuclide	I-131(approx. 8 days)	2.6E+04	4.8E+02	2.9E+04
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	4.9E+05	1.3E+03	1.2E+06
	Cs-136(approx. 13 days)	2.6E+03	ND	7.3E+03
	Cs-137(approx. 30 years)	5.1E+05	1.3E+03	1.3E+06
	Te-129m(approx. 34 days)	1.2E+05	ND	2.3E+05
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	5.0E+02	ND	1.4E+03
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	2.4E+03	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap.

<sup>\*2</sup> Distance from the stack of Unit 1, 2



### Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				(6) (Unit: Bq/kg·dry soil)
	Sampling spot	[Fixed point①]*1 Playground (west-northwest approx. 500m)*2	[Fixed point②]*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	5/30	5/30	5/30
	Analytical body	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3
	Date of analysis	6/1	6/1	6/1
Nuclide	I-131(approx. 8 days)	1.3E+04	7.3E+01	1.5E+04
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	3.6E+05	1.9E+02	7.7E+05
	Cs-136(approx. 13 days)	1.0E+03	ND	1.6E+03
	Cs-137(approx. 30 years)	3.7E+05	2.2E+02	8.1E+05
	Te-129m(approx. 34 days)	4.1E+04	ND	2.2E+05
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.



# ORIGINAL

#### Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				(Unit:Bq/kg•soil)
	Sampling spot	【Fixed point①】*1 Playground (west-northwest approx. 500m) *2	【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2	【Fixed point③】*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	5/30	5/30	5/30
	Analytical body	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3
	Date of analysis	6/1	6/1	6/1
Nuclide	I-131(approx. 8 days)	1.3E+04	7.3E+01	1.5E+04
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	3.6E+05	1.9E+02	7.7E+05
	Cs-136(approx. 13 days)	1.0E+03	ND	1.6E+03
	Cs-137(approx. 30 years)	3.7E+05	2.2E+02	8.1E+05
	Te-129m(approx. 34 days)	4.1E+04	ND	2.2E+05
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

REVISED

(Attachment 2)

Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

### 1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

#### 2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				(6) (Unit: Bg/kg•wet soil)
	Sampling spot	【Fixed point①】*1 Playground (west-northwest approx. 500m)*2	[Fixed point2]*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	6/2	6/2	6/2
	Analytical body	JAEA	JAEA	JAEA
	Date of analysis	6/3	6/3	6/3
Nuclide	I-131(approx. 8 days)	1.8E+04	3.3E+02	2.0E+04
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	6.7E+05	2.2E+03	1.7E+06
	Cs-136(approx. 13 days)	2.7E+03	ND	6.1E+03
	Cs-137(approx. 30 years)	7.1E+05	2.4E+03	1.8E+06
	Te-129m(approx. 34 days)	8.3E+04	ND	3.1E+05
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	8.8E+02	ND	1.4E+03
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	3.3E+03	ND	2.5E+03

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2



### Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				(Unit:Ba/ka•soil)
	Sampling spot	【Fixed point①】*1 Playground (west-northwest approx. 500m)*2	[Fixed point2]*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	6/2	6/2	6/2
	Analytical body	JAEA	JAEA	JAEA
	Date of analysis	6/3	6/3	6/3
Nuclide	I-131(approx. 8 days)	1.8E+04	3.3E+02	2.0E+04
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	6.7E+05	2.2E+03	1.7E+06
	Cs-136(approx. 13 days)	2.7E+03	ND	6.1E+03
	Cs-137(approx. 30 years)	7.1E+05	2.4E+03	1.8E+06
	Te-129m(approx. 34 days)	8.3E+04	ND	3.1E+05
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	8.8E+02	ND	1.4E+03
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	3.3E+03	ND	2.5E+03

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2



1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(6) (Unit:Bq/kg\*dry soil [JCAC]
Bq/kg\*wet soil [JAEA] )

							t son toxext
	Sampling spot	【Fixed po Playg (west-northwest		【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2			oint③]*1 waste disposal facility approx. 500m)*2
	Date of sampling	6/6	6/9	6/6	6/9	6/6	6/9
	Analytical body	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA
	Date of analysis	6/8	6/10	6/8	6/10	6/8	6/10
Nuclide	I-131(approx. 8 days)	7.2E+03	9.3E+03	3.6E+01	5.2E+01	6.8E+03	7.9E+03
	I-132(approx. 2 hours)	ND	ND	ND	ND	ND	ND
	Cs-134(approx. 2 years)	4.5E+05	5.8E+05	3.5E+02	4.6E+02	6.7E+05	1.2E+06
	Cs-136(approx. 13 days)	1.4E+03	1.5E+03	ND	ND	1.9E+03	3.3E+03
	Cs-137(approx. 30 years)	4.6E+05	6.2E+05	3.5E+02	4.8E+02	7.0E+05	1.3E+06
	Te-129m(approx. 34 days)	8.6E+04	5.6E+04	ND	ND	1.8E+05	2.0E+05
	Te-132(approx. 3 days)	ND	ND	ND	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND	ND	ND	ND
	Nb-95(approx. 35 days)	ND	6.9E+02	ND	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	2.5E+03	ND	ND	ND	1.6E+03

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

(Linit : Ba/ka soil)



### Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

	CS-137: ND~21	Bq/kg·dry soil, Others: ND					(Unit:Bq/kg•soil
	【Fixed point①】*1 Sampling spot Playground (west-northwest approx. 500m) *2		【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2		【Fixed point③】*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2		
	Date of sampling	6/6	6/9	6/6	6/9	6/6	6/9
	Analytical body	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA
	Date of analysis	6/8	6/10	6/8	6/10	6/8	6/10
Nuclide	I-131(approx. 8 days)	7.2E+03	9.3E+03	3.6E+01	5.2E+01	6.8E+03	7.9E+03
	I-132(approx. 2 hours)	ND	ND	ND	ND	ND	ND
	Cs-134(approx. 2 years)	4.5E+05	5.8E+05	3.5E+02	4.6E+02	6.7E+05	1.2E+06
	Cs-136(approx. 13 days)	1.4E+03	1.5E+03	ND	ND	1.9E+03	3.3E+03
	Cs-137(approx. 30 years)	4.6E+05	6.2E+05	3.5E+02	4.8E+02	7.0E+05	1.3E+06
	Te-129m(approx. 34 days)	8.6E+04	5.6E+04	ND	ND	1.8E+05	2.0E+05
	Te-132(approx. 3 days)	ND	ND	ND	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND	ND	ND	ND
	Nb-95(approx. 35 days)	ND	6.9E+02	ND	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	2.5E+03	ND	ND	ND	1.6E+03

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

# REVISED

### Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

Evaluation

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bg/kg·dry soil, Others: ND

(Unit:Bq/kg·dry soil [JCAC] Bq/kg·wet soil [JAEA] [Fixed point(3)]\*1 [Fixed point1]\*1 [Fixed point(2)]\*1 Adjacent to industrial waste disposal facility Sampling spot Playground Forest of wild birds (west-northwest approx. 500m)\*2 (west approx. 500m)\*2 (south-southwest approx. 500m)\*2 6/13 6/23 6/16 6/23 Date of sampling 6/16 6/20 6/13 6/20 6/13 6/16 6/23 6/20 Japan Japan Japan Japan Japan Japan Chemical Chemical Chemical Chemical Chemical Chemical Analytical body JAEA **JAEA** JAEA JAEA JAEA JAEA Analysis Analysis Analysis Analysis Analysis Analysis Center\*3 Center\*3 Center\*3 Center\*3 Center\*3 Center\*3 Date of analysis 6/16 6/17 6/22 6/24 6/16 6/17 6/22 6/24 6/16 6/17 6/22 6/24 Nuclide I-131(approx. 8 days) 3.5E+03 4.6E+03 2.9E+03 1.5E+03 7.8E+01 ND ND ND 3.2E+03 7.6E+03 ND ND ND I-132(approx. 2 hours) ND 4.6E+05 6.4E+05 4.6E+05 4.8E+05 3.8E+03 2.6E+03 9.9E+02 3.7E+03 4.8E+05 2.2E+06 2.1E+06 1.1E+06 Cs-134(approx. 2 years) ND ND 1.6E+03 9.9E+02 7.0E+02 ND ND ND ND 3.5E+03 2.7E+03 1.6E+03 Cs-136(approx. 13 days) 6.9E+05 Cs-137(approx. 30 years) 4.7E+05 4.8E+05 5.2E+05 4.1E+03 2.7E+03 1.1E+03 4.2E+03 5.0E+05 2.3E+06 2.2E+06 1.2E+06 1.1E+05 ND ND ND ND 3.2E+05 3.8E+05 1.6E+05 Te-129m(approx. 34 days) 8.0E+04 6.4E+04 9.1E+04 7.4E+04 ДZ Te-132(approx. 3 days) ND Ba-140(approx. 13 days) ND 9.4E+02 9.2E+02 ДN Z ND ДZ ND ДN ND Nb-95(approx. 35 days) ND ND ND ND Z ND ND ДZ ND Z ND Ru-106(approx. 370 days) ND ND ND ND ND ND ND ND ДZ ND ND ДZ ND ND ND Mo-99(approx. 66 hours) ND ND ДZ ND Z Tc-99m(approx. 6 hours) ND La-140(approx. 2 days) ND Be-7(approx. 53 days) Ag-110m(approx. 250 days) ND ND ND ND ND ND ND ND ND 4.0E+03 ND 1.9E+03

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1. 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

# ORIGINAL

#### Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

Evaluation

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

												(U	nit:Bq/kg•soil)
	Sampling spot	(w	【Fixed po Playg vest-northwest		*2			oint②】*1 wild birds ox. 500m)*2		,		oint③】*1 waste disposal approx. 500m)	,
	Date of sampling	6/13	6/16	6/20	6/23	6/13	6/16	6/20	6/23	6/13	6/16	6/20	6/23
	Analytical body	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA	Japan Chemical Analysis Center*3	JAEA
	Date of analysis	6/16	6/17	6/22	6/24	6/16	6/17	6/22	6/24	6/16	6/17	6/22	6/24
Nuclide	I-131(approx. 8 days)	3.5E+03	4.6E+03	2.9E+03	1.5E+03	7.8E+01	ND	ND	ND	3.2E+03	7.6E+03	ND	ND
	I-132(approx. 2 hours)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cs-134(approx. 2 years)	4.6E+05	6.4E+05	4.6E+05	4.8E+05	3.8E+03	2.6E+03	9.9E+02	3.7E+03	4.8E+05	2.2E+06	2.1E+06	1.1E+06
	Cs-136(approx. 13 days)	ND	1.6E+03	9.9E+02	7.0E+02	ND	ND	ND	ND	ND	3.5E+03	2.7E+03	1.6E+03
	Cs-137(approx. 30 years)	4.7E+05	6.9E+05	4.8E+05	5.2E+05	4.1E+03	2.7E+03	1.1E+03	4.2E+03	5.0E+05	2.3E+06	2.2E+06	1.2E+06
	Te-129m(approx. 34 days)	8.0E+04	1.1E+05	6.4E+04	9.1E+04	ND	ND	ND	ND	7.4E+04	3.2E+05	3.8E+05	1.6E+05
	Te-132(approx. 3 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nb-95(approx. 35 days)	ND	9.4E+02	ND	9.2E+02	ND	ND	ND	ND	ND	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.0E+03	ND	1.9E+03

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.



1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Cs-137: ND~21Bq/kg·dry soil, Others: ND

(6) (Unit:Bq/kg·dry soil) [Fixed point2]\*1 [Fixed point1]\*1 [Fixed point(3)]\*1 Sampling spot Forest of wild birds Adjacent to industrial waste disposal facility Playground (south-southwest approx. 500m)\*2 (west-northwest approx. 500m)\*2 (west approx. 500m)\*2 6/27 6/27 6/27 Date of sampling Analytical body Japan Chemical Analysis Center\*3 Japan Chemical Analysis Center\*3 Japan Chemical Analysis Center\*3 7/4 7/4 Date of analysis 7/4 Nuclide I-131(approx. 8 days) ND ND ND ND ND ND I-132(approx. 2 hours) Cs-134(approx. 2 years) 5.3E+05 7.1E+03 2.4E+05 Cs-136(approx. 13 days) ND ND ND 2.5E+05 Cs-137(approx. 30 years) 5.4E+05 7.8E+03 Te-129m(approx. 34 days) ND ND 6.2E+04 ND ND ND Te-132(approx. 3 days) Ba-140(approx. 13 days) ND ND ND ND ND ND Nb-95(approx. 35 days) ND ND ND Ru-106(approx. 370 days) Mo-99(approx. 66 hours) ND ND ND ND ND ND Tc-99m(approx. 6 hours) ND La-140(approx. 2 days) ND ND ND ND ND Be-7(approx. 53 days) ND ND Ag-110m(approx. 250 days)

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.



1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				(Unit:Bg/kg·soil)
	Sampling spot	【Fixed point①】*1 Playground (west-northwest approx. 500m)*2	【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	6/27	6/27	6/27
	Analytical body	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3
	Date of analysis	7/4	7/4	7/4
Nuclide	I-131(approx. 8 days)	ND	ND	ND
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	5.3E+05	7.1E+03	2.4E+05
-	Cs-136(approx. 13 days)	ND	ND	ND
	Cs-137(approx. 30 years)	5.4E+05	7.8E+03	2.5E+05
	Te-129m(approx. 34 days)	ND	ND	6.2E+04
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

(Appendix 2)

(6) (Unit · Ba/ka • dry soil)



#### Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				(Unit: Bq/kg-dry soil)
Sampling spot		【Fixed point①】*1 Playground (west-northwest approx. 500m)*2	【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	7/4	7/4	7/4
	Analytical body	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3
	Date of analysis	7/8	7/8	7/8
Nuclide	I-131(approx. 8 days)	ND	1.1E+02	ND
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	4.2E+05	4.5E+03	1.1E+05
	Cs-136(approx. 13 days)	ND	ND	ND
	Cs-137(approx. 30 years)	4.4E+05	5.1E+03	1.1E+05
	Te-129m(approx. 34 days)	ND	ND	ND
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

(Appendix 2)

(Unit · Ba/ka • soil)



#### Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				(Unit:Bq/kg• soii)
	Sampling spot	【Fixed point①】*1 Playground (west-northwest approx. 500m)*2	【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	7/4	7/4	7/4
	Analytical body	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3
	Date of analysis	7/8	7/8	7/8
Nuclide	I-131(approx. 8 days)	ND	1.1E+02	ND
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	4.2E+05	4.5E+03	1.1E+05
	Cs-136(approx. 13 days)	ND	ND	ND
	Cs-137(approx. 30 years)	4.4E+05	5.1E+03	1.1E+05
	Te-129m(approx. 34 days)	ND	ND	ND
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	ND	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

(Appendix 2)

(6) (Unit:Bq/kg·dry soil)

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#### Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below.

Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

Sampling spot		【Fixed point①】*1 Playground (west-northwest approx. 500m)*2	【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	7/11	7/11	7/11
	Analytical body	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3
	Date of analysis	7/14	7/14	7/14
Nuclide	I-131(approx. 8 days)	ND	ND	ND
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	4.0E+05	1.4E+03	2.4E+05
	Cs-136(approx. 13 days)	ND	ND	ND
	Cs-137(approx. 30 years)	4.3E+05	1.4E+03	2.6E+05
	Te-129m(approx. 34 days)	ND	ND	4.0E+04
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	1.9E+03	ND	6.4E+03

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> Analysis results from Japan Chemical Analysis Center do not consider half-life until the sampling date.

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#### Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				(Unit:Bq/kg• soil)
	Sampling spot	【Fixed point①】*1 Playground (west-northwest approx. 500m)*2	【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
	Date of sampling	7/11	7/11	7/11
	Analytical body	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3
	Date of analysis	7/14	7/14	7/14
Nuclide	I-131(approx. 8 days)	ND	ND	ND
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	4.0E+05	1.4E+03	2.4E+05
	Cs-136(approx. 13 days)	ND	ND	ND
	Cs-137(approx. 30 years)	4.3E+05	1.4E+03	2.6E+05
	Te-129m(approx. 34 days)	ND	ND	4.0E+04
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	1.9E+03	ND	6.4E+03

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

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1.Result of measurement:

The results of gamma ray nuclide analysis are as follows. Analysis was conducted on all samples which we conducted plutonium analysis.

2. Evaluation:

The result of gamma ray nuclide analysis of soil conducted in Fukushima Prefecture during FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				(6) (Unit:Bq/kg•dry soil)
Sampling spot		[Fixed point①]*1 Playground (west-northwest approx. 500m)*2	【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2	[Fixed point③]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
Date of sampling		7/18	7/18	7/18
Analytical body		Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3
Date of analysis		7/21	7/21	7/21
Nuclide	I-131(approx. 8 days)	ND	ND	ND
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	6.7E+05	2.0E+02	2.3E+05
	Cs-136(approx. 13 days)	ND	ND	ND
	Cs-137(approx. 30 years)	7.1E+05	2.8E+02	2.4E+05
	Sb-125(approx. 3 years)	1.3E+04	ND	ND
	Te-129m(approx. 34 days)	4.8E+05	ND	ND
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	3.3E+03	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

<sup>\*2</sup> Distance from the stack of Unit 1, 2

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<Results of the soil analysis in Fukushima Prefecture conducted in FY 2009>

				(Unit:Bq/kg•soil)
Sampling spot		【Fixed point①】*1 Playground (west-northwest approx. 500m)*2	【Fixed point②】*1 Forest of wild birds (west approx. 500m)*2	[Fixed point3]*1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m)*2
Date of sampling		7/18	7/18	7/18
Analytical body		Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3
Date of analysis		7/21	7/21	7/21
Nuclide	I-131(approx. 8 days)	ND	ND	ND
	I-132(approx. 2 hours)	ND	ND	ND
	Cs-134(approx. 2 years)	6.7E+05	2.0E+02	2.3E+05
	Cs-136(approx. 13 days)	ND	ND	ND
	Cs-137(approx. 30 years)	7.1E+05	2.8E+02	2.4E+05
	Sb-125(approx. 3 years)	1.3E+04	ND	ND
	Te-129m(approx. 34 days)	4.8E+05	ND	ND
	Te-132(approx. 3 days)	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND
	Nb-95(approx. 35 days)	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
	Ag-110m(approx. 250 days)	3.3E+03	ND	ND

<sup>\*1</sup> In regard to fixed points "playground" and "Adjacent to industrial waste disposal facility", sampling was conducted alongside the previous sampling point in order to avoid overlap. In regard to fixed point "forest of wind birds", sampling was conducted on the same sampling point but in deeper direction. (In case we are unable to collect samples at the sampling point, the sampling point will be changed.)

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