Nuclides Analysis Result of the Gamma Rays in the Soil of Fukushima Daiichi NPS

1. Measurement Result: The following is the analysis result of γ ray nuclides in the soil measured at Fukushima Daiichi NPS

(Unit：Bq/kg, Dry Soil)

Place of Sampling		【Fixed Point ①】 *1 Ground (Approx. 500m West-Northwest)*2	【Fixed Point ②】 *1 Wild Birds' Forest (Approx. 500m West)*2	【Fixed Point ③】 *1 Near the Industrial Waste Disposal Facility (Approx. 500m South-Southwest)*2
Date of Sampling		Apr 16	Apr 16	Apr 16
Analyzed by		KAKEN Co.,Ltd. *3	KAKEN Co.,Ltd. *3	KAKEN Co.,Ltd. *3
Date of Analysis		Jul 3	Jul 3	Jul 3
Nuclides	I-131 (Approx. 8 days)	ND	ND	ND
	I-132 (Approx. 2 hours)	ND	ND	ND
	Cs-134 (Approx. 2 years)	2.0E+04	7.1E+03	1.9E+05
	Cs-136 (Approx. 13 days)	ND	ND	ND
	Cs-137 (Approx. 30 years)	3.6E+04	1.3E+04	3.4E+05
	Sb-125 (Approx. 3 years)	ND	ND	ND
	Te-129m (Approx. 34 days	ND	ND	ND
	Te-132 (Approx. 78 hours)	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. 40 hours)	ND	ND	ND
	Be-7 (Approx. 53 days)	ND	ND	ND
	Ag-110m (Approx. 250 day	ND	ND	ND

*1 Sampling was conducted in the area adjacent to the past sampling location to avoid duplication.

*2 The Distance from Unit 1-2 Stacks

*3 The analysis results provided by Kaken Inc. have not been corrected in terms of half-life period until the time of sample collection.

2. Evaluation: The following is the analysis result of γ ray nuclides in the soil measured in Fukushima Prefecture in 2009.
Radioactive materials of higher density are detected this time supposedly due to the accident.

< Soil Analysis Result Provided by Fukushima Prefecture in 2009 >

Cs-137: ND - 21Bq/kg, Dry Soil, Others: ND

Corrected

Analysis Results of Sr Contained in the Soil of Fukushima Daiichi Nuclear Power Station

1. Measurement Results

(Unit: Bq/kg, Dry soil)

Sampling location Distance from Unit 1-2 exhaust stack is provided in parenthesis.	Date	Sr-89	Sr-90
1. Sports ground (Approx. 500m West-Northwest)*1	April 16	N.D.	(1.7±0.09) ×10^1
2. Wild Bird Forest (Approx. 500m West)*1		N.D.	(9.6±0.17) ×10^1
3. Near the industrial waste disposal facility (Approx. 500m South-Southwest)*1		N.D.	(1.7±0.04) ×10^2
Range of past measurement results (1999-2008)*2		–	ND～4.3

*1 Sampling was done in areas adjacent to the past sampling locations.
*2 Source: 2009 Report on the Result of Radioactivity Measurement around Nuclear Power Plant (Fukushima Nuclear Power Station Coordinating Committee for Safety Technology)

2. Analysis institution: Kaken Lab. Co., Ltd

3. Evaluation

The higher Sr-90 density detected this time compared to that of the fallouts observed in Japan during the past nuclear tests in the atmosphere is considered to be due to the nuclear accident.

*Sr-90 measurement errors announced on August 8 have been corrected as follows.
$(1.7 \pm 0.14) \times 10^1$ corrected to $(1.7 \pm 0.09) \times 10^1$
$(9.6 \pm 0.27) \times 10^1$ corrected to $(9.6 \pm 0.17) \times 10^1$
$(1.7 \pm 0.05) \times 10^2$ corrected to $(1.7 \pm 0.04) \times 10^2$

End