Nuclides Analysis Result of Radioactive Materials in the Marine Soil <1/2>

(Data summarized on August 8)

Place of Sampling	1F, North of Unit 5-6 Discharge Channel	1F, Around South Discharge Channel
Date of Sampling	Mar 4, 2014	Mar 4, 2014
Detected Nuclides (Half-life)	Density of Sample (Unit: Bq/kg, Dry Soil)	
Cs-134 (Approx. 2 years)	250	170
Cs-137 (Approx. 30 years)	660	400
Sr-90 (Approx. 29 years)	3.7	1.3

Range of Past Measurement Values in the Sea Area Near 1F and 2F (2001-2008): 0.17 Bq/kg, Dry Soil
Source: “2009 Report on the Result of Radioactivity Measurement around Nuclear Power Plant (Fukushima Nuclear Power Station Coordinating Committee for Safety Technology)

* Radioactivity Density "－" means "not applicable".
* Nuclide analysis results of Cs-134 and Cs-137 were announced on February 27, 2014.
* Nuclides analysis of Sr-90 was done by KAKEN Inc..

(Evaluation)
The densities of Sr-90 are higher than those of the range of past measurement values in the sea area near Fukushima Daiichi NPS and Fukushima Daini NPS. Therefore, there is a possibility that the higher densities originate from the accident this time.

Nuclides Analysis Result of Radioactive Materials in the Marine Soil <2/2>

(Data summarized on August 8)

Place of Sampling	1F, North of Unit 5-6 Discharge Channel	1F, Around South Discharge Channel
Date of Sampling	May 12, 2014	May 12, 2014
Detected Nuclides (Half-life)	Density of Sample (Unit: Bq/kg, Dry Soil)	
Cs-134 (Approx. 2 years)	260	96
Cs-137 (Approx. 30 years)	700	240
Sr-90 (Approx. 29 years)	ND	ND
Range of Past Measurement Values in the Sea Area Near 1F and 2F (2001-2008): 0.17 Bq/kg, Dry Soil Source: “2009 Report on the Result of Radioactivity Measurement around Nuclear Power Plant (Fukushima Nuclear Power Station Coordinating Committee for Safety		

* Radioactivity Density "—" means "not applicable".
* Nuclide analysis results of Cs-134 and Cs-137 were announced on June 19, 2014.
* When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows.
  Sr-90: Approx. 0.65Bq/kg, Dry soil
  As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.
* Nuclides analysis of Sr-90 was done by KAKEN Inc..

(Evaluation)

Sr-90 was not detected in the sample collected this time.

Analysis Result of Pu in the Marine Soil <1/2>

(Data summarized on August 8)

1. Measurement Result:

(Unit: Bq/kg･dry soil)

Place of Sampling	Date	Pu-238	Pu-239+Pu-240
1F, North of Unit 5-6 Discharge Channel	Mar 4, 2014	N.D. [1.7×10^{-2}]	$(7.7\pm1.2)\times10^{-2}$
1F, Around South Discharge Channel		N.D. [1.6×10^{-2}]	$(3.5\pm0.81)\times10^{-2}$
Range of Past Measurement Values in the Sea Area Near 1F and 2F (FY1999 - FY2008)*1		-	1.7×10^{-1} ~ 5.6×10^{-1}
Range of Past Measurement Values in Japan (FY2006 - FY2010)*2		N.D. ~ 6×10^{-2}	-

[ ] shows below the detection limit.

*1 Source "Report on the environmental radioactivity measurement around the Nuclear Power Plant (FY2009)", Committee on the safety technology of Nuclear Power Plants in Fukushima.

*2 Source: "Environmental Radiation Database"
(Ministry of Education, Culture, Sports, Science and Technology)

2. Analytical Institution: KAKEN Inc.

3. Evaluation:

The density level of Pu-239+Pu-240 detected on March 4, 2014, is the same as the past density measurements conducted along the seacoasts of Fukushima Daiichi NPS and Fukushima Daini NPS.

End

Analysis Result of Pu in the Marine Soil <2/2>

(Data summarized on August 8)

1. Measurement Result:

(Unit: Bq/kg･dry soil)

Place of Sampling	Date	Pu-238	Pu-239+Pu-240
1F, North of Unit 5-6 Discharge Channel	Apr 10, 2014	N.D. [1.4×10^{-2}]	$(9.5\pm1.1)\times10^{-2}$
1F, Around South Discharge Channel		N.D. [9.8×10^{-3}]	$(6.8\pm0.81)\times10^{-2}$
Range of Past Measurement Values in the Sea Area Near 1F and 2F (FY1999 - FY2008)*1		-	1.7×10^{-1} ~ 5.6×10^{-1}
Range of Past Measurement Values in Japan (FY2006 - FY2010)*2		N.D. ~ 6×10^{-2}	-

[ ] shows below the detection limit.

*1 Source "Report on the environmental radioactivity measurement around the Nuclear Power Plant (FY2009)", Committee on the safety technology of Nuclear Power Plants in Fukushima.

*2 Source: "Environmental Radiation Database"
(Ministry of Education, Culture, Sports, Science and Technology)

2. Analytical Institution: Japan Chemical Analysis Center

3. Evaluation:

The density level of Pu-239+Pu-240 detected on April 10, 2014, is the same as the past density measurements conducted along the seacoasts of Fukushima Daiichi NPS and Fukushima Daini NPS.

End