

Analysis Result of Pu in the Marine Soil

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	Nov 8, 2012	N.D. [$<2.7 \times 10^{-2}$]	$(8.3 \pm 1.4) \times 10^{-2}$
1F, Around South Discharge Channel	Nov 26, 2012	N.D. [$<2.9 \times 10^{-2}$]	$(6.9 \pm 1.3) \times 10^{-2}$
Range of Past Measurement Values in the Sea Area Near 1F and 2F (FY1999 - FY2008) ^{*1}		-	$1.7 \times 10^{-1} - 5.6 \times 10^{-1}$
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 (2008)", 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:

Given that the density level of Pu-239+Pu-240 detected on November 8 and 26, 2012, is the same as the past density measurements conducted along the seacoasts of 1F and 2F, it cannot be stated with absolute certainty that the presence of these particles is due to the accident.

End

Nuclides Analysis Result of Radioactive Materials in the Marine Soil

Place of Sampling	1F, North of Unit 5-6 Discharge Channel	1F, Around South Discharge Channel
Date of Sampling	Nov 8, 2012	Nov 26, 2012
Detected Nuclides (Half-life)	Density of Sample (Unit: Bq/kg, Dry Soil)	
I-131 (Approx. 8 days)	ND	ND
Cs-134 (Approx. 2 years)	370	230
Cs-137 (Approx. 30 years)	600	380
Sr-89 (Approx. 51 days)	ND	ND
Sr-90 (Approx. 29 years)	ND	19
Range of Past Measurement Values in the Sea Area Near 1F and 2F (FY1999 - FY2008): 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 I-131, Cs-134, Cs-137 were announced on February 20.

* When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows.

I-131: Approx. 48Bq/kg, Dry Soil, Sr-89: Approx. 39Bq/kg, Dry Soil, Sr-90: Approx. 2Bq/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-89 and Sr-90 were 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 1F and 2F.

Therefore, there is a possibility that the higher densities originate from the accident this time.