

Nuclide analysis results of ocean soil

Reference

(Data summarized on March 7)

Place of Sampling	Around North Discharge Channel of 2F ( Around 3,4u Discharge Channel) ( approx. 10 km from 1F )				
Time of Sampling	Mar 05, 2012 (Not sampled)				
Detected Nuclides (Half-life)	Radioactivity density ( Bq/kg·moist soil)				
I-131 (about 8 days)	-				
Cs-134 (about 2 years)	-				
Cs-137 (about 30 years)	-				

No sampling due to bad weather

Am, Cm Analysis Result in the ocean soil

1. Analysis result

( Unit : Bq/kg·Dry soil )

Sample location	Sample date Institution	Pu-238 <sup>*1</sup>	Pu-239 + 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
8km of fshore of Iwasawa shore	Nov 18 Japan Chemical Analysis Center	( 1.9±0.53 ) × 10 <sup>-2</sup>	( 5.3±0.35 ) × 10 <sup>-1</sup>	( 6.6±0.34 ) × 10 <sup>0</sup>	( 3.6±0.60 ) × 10 <sup>-1</sup>	( 6.8±0.35 ) × 10 <sup>0</sup>	( 2.4±0.19 ) × 10 <sup>-1</sup>	N.D. [<1.3 × 10 <sup>-2</sup> ]	N.D. [<1.2 × 10 <sup>-2</sup> ]
Average nuclide concentration ratio of Unit 1 to 3 (Pu-238 being 1) <sup>*3</sup>		1	-	-	-	-	0.1	10	1

\*1 : disclosed on Jan 20, 2012, \*2 : disclosed on Feb 2, 2012, \*3: calculated amount according to ORIGEN code (round number)

2. Evaluation

It can not be concluded that Am-241 detected in this analysis derives from this accident because of the following reasons:

- Detected density of Pu-238 is within the range of past analysis in Japan. Detected density of Pu-239 and 240 are within the range of past analysis (from 1999 to 2008) in the sea around Fukushima Daiichi Nuclear Power Station and Fukushima Daini Nuclear Power Station.
- Detected level of U-234, U-235 and U-238 are evaluated to be in the same level as in the natural environment.
- Cm-242, Cm-243 + Cm-244, which do not exist in the natural environment, are not detected.

End