

Gamma nuclide analysis in soil of Fukushima Daiichi Nuclear Power Station

1. Result The result of nuclide analysis of gamma radioactivity in soil is as follows. We analyzed all the materials that we analyzed.

2. Evaluation The result of nuclide analysis of gamma radioactivity in soil measured at Fukushima pref. in 2009 is as follows. Comparing the result in 2009, high density of nuclides are detected.

< Result at Fukushima in 2009 >

Cs-137: ND ~ 21 Bq/kg oven-dry soil, other: ND

(Unit: Bq/kg oven-dry soil)

Place of Sampling	[Fixed point]*1 Ground (West-North-West around 500m)*2	[Fixed point]*1 Yatyonomori (West around 500m)*2	[Fixed point]*1 Near industrial waste process place (South South West around 500m)*2
Date of sampling	January 16	January 16	January 16
Organization	JCAC*3	JCAC*3	JCAC*3
Date of measurement	January 17	January 17	January 17
nuclides			
I-131 (approx. 8 days)	ND	ND	ND
I-132 (approx. 2 hours)	ND	ND	ND
Cs-134 (approx. 2 years)	1.8E+05	3.2E+02	5.8E+05
Cs-136 (approx. 13 days)	ND	ND	ND
Cs-137 (approx. 30 years)	2.2E+05	3.5E+02	7.3E+05
Sb-125 (approx. 3 years)	ND	ND	ND
Te-129m (approx. 34 days)	ND	ND	ND
Te-132 (approx. 78 hrs)	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 hrs)	ND	ND	ND
Tc-99m (approx. 6 hours)	ND	ND	ND
La-140 (approx. 40 hrs)	ND	ND	ND
Be-7 (approx. 53 days)	ND	ND	ND
Ag-110m (approx. 250 days)	ND	ND	ND

*1 We sampled near the 「 Ground」, 「 Near industrial waste process place」 in order not to duplicate the sampling materials. We sampled in depth direction at 「 Yatyonomori」 and changed the points when we continue to sample the soil in the same hole.

*2 Distance of Unit 1, 2 staffs

*3 Result of analysis done by JCAC does not apply the half time calibration.