

Detection of gamma ray in the soil in Fukushima Daiichi Nuclear Power Station

1. Result of Analysis Following is the result of nuclide analysis on the gamma ray in the soil at Fukushima Daiichi Nuclear Power Station. The analysis was conducted on all the samples used for the Pu analysis.
2. Evaluation The density of the radioactive materials was higher compared to the result of nuclide analysis conducted in 2009 on the gamma ray in the soil in Fukushima prefecture, which is shown below.
 <Result of analysis conducted in 2009 on the soil in Fukushima prefecture>
 Cs-137: ND ~ 21Bq/kg·Dry soil, Others: ND

(Unit : Bq/kg · Dry soil)

Place of Sampling	[Fixed point]*1 Ground (West-northwest approx. 500m) *2	[Fixed point]*1 Wild birds' forest (West approx. 500m) *2	[Fixed point]*1 Near the industrial waste disposal facility (South-southwest approx. 500m) *2	
Date of sampling	10/10	10/10	10/10	
Organizaion	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	Japan Chemical Analysis Center*3	
Date of measurement	10/12	10/12	10/12	
Detected nuclide	I-131(Approx. 8 days)	ND	ND	
	I-132(approx. 2 hours)	ND	ND	
	Cs-134(approx. 2 years)	4.6E+05	3.2E+03	1.3E+06
	Cs-136(approx. 13 days)	ND	ND	ND
	Cs-137(approx. 30 years)	5.1E+05	4.0E+03	1.5E+06
	Sb-125(approx. 3 years)	ND	ND	ND
	Te-129m(approx. 34 days)	ND	ND	ND
	Te-132(approx.78hrs)	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. 40hours)	ND	ND	ND
	Be-7(approx. 53 days)	ND	ND	ND
Ag-110m(approx. 250 days)	2.0E+03	ND	ND	

*1 Samples were collected at the places near [Ground] and [Near the industrial waste disposal facility], in order to avoid the same places analyzed in the past surveys. At [Wild birds' forest], samples were collected at the same place in the direction of the depth and the place is changed when no more samples can be collected.).

*2 Distance from Units 1&2

*3 Regarding the result of analysis by Japan Chemical Analysis, the half-life is not adjusted according to the period before sampling.