## Result of gamma ray nuclide analysis of soil - Fukushima Daiichi Nuclear Power Station

- 1.Result of measurement: The results of gamma ray nuclide analysis from the samples taken in the power station are as follows. Analysis was conducted on all samples on which we conducted plutonium analysis.

  2. Evaluation: The result of gamma ray nuclide analysis of soil conducted by Fukushima Prefecture in FY 2009 is shown below. Compared to this, higher radioactivity density has been detected.

  <Results of the soil analysis conducted by Fukushima Prefecture in FY 2009>

  Cs-137: ND ~ 21Bq/kg·dry soil, Others: ND

(Unit:Ba/ka·wet soil)

Sampling spot		[Fixed point ] *1 Playground (west-northwest approx. 500m) *2				[Fixed point ]*1 Forest of wild birds (west approx. 500m)*2				[Fixed point ] *1 Adjacent to industrial waste disposal facility (south-southwest approx. 500m) *2			
Date of sampling		6/13	6/16	6/20	6/23	6/6	6/16	6/20	6/9	6/6	6/16	6/20	6/9
Analyses Organization		Japan Chemical Analysis Center*3	Japan Atomic Energy Agency	Japan Chemical Analysis Center*3	Japan Atomic Energy Agency	Japan Chemical Analysis Center*3	Japan Atomic Energy Agency	Japan Chemical Analysis Center*3	Japan Atomic Energy Agency	Japan Chemical Analysis Center*3	Japan Atomic Energy Agency	Japan Chemical Analysis Center*3	Japan Atomic Energy Agency
Date of analysis		6/16	6/17	6/22	6/24	6/16	6/17	6/22	6/24	6/16	6/17	6/22	6/24
Nuclide	I-131(approx. 8 days)	3.5E+03	4.6E+03	2.9E+03	1.5E+03	7.8E+01	ND	ND	ND	3.2E+03	7.6E+03	ND	ND
	I-132(approx. 2 hours)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cs-134(approx. 2 years)	4.6E+05	6.4E+05	4.6E+05	4.8E+05	3.8E+03	2.6E+03	9.9E+02	3.7E+03	4.8E+05	2.2E+06	2.1E+06	1.1E+06
	Cs-136(approx. 13 days)	ND	1.6E+03	9.9E+02	7.0E+02	ND	ND	ND ND	ND	ND	3.5E+03	2.7E+03	1.6E+03
	Cs-137(approx. 30 years)	4.7E+05	6.9E+05	4.8E+05	5.2E+05	4.1E+03	2.7E+03	1.1E+03	4.2E+03	5.0E+05	2.3E+06	2.2E+06	1.2E+06
	Te-129m(approx. 34 days)	8.0E+04	1.1E+05	6.4E+04	9.1E+04	ND	ND	ND ND	ND	7.4E+04	3.2E+05	3.8E+05	1.6E+05
	Te-132(approx. 3 days)	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND
	Ba-140(approx. 13 days)	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND
	Nb-95(approx. 35 days)	ND	9.4E+02	ND	9.2E+02	ND	ND	ND ND	ND	ND	ND	ND	ND
	Ru-106(approx. 370 days)	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND
	Mo-99(approx. 66 hours)	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND
	Tc-99m(approx. 6 hours)	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND
	La-140(approx. 2 days)	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND
	Be-7(aapprox. 53 days)	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND
	Ag-110m(approx. 250 days	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	4.0E+03	ND	1.9E+03

<sup>\*1</sup> Avoiding duplicates, we collected samples from adjacent area for Playground and Adjacent to industrial waste disposal facility. We collected samples depth direction at same point for Forest of wild birds. (In case we unable to collect samples at

<sup>\*2</sup> Distance from the stack of Unit 1, 2

<sup>\*3</sup> No half life period adjustment before samplyig at Japan Chemical Analysis Center