(Attachment 3)

Fukushima Daiichi Nuclear Power Station: Americium and Curium analysis result in the soil

1.Analysis result

(Unit：Bq/kg･wet soil)

Sampling spot (): Distance from the stack of Unit 1, 2	Date of sampling/ Analyses organization	Pu-238[*1]	Pu-239[*1] Pu-240[*1]	U-234[*2]	U-235[*2]	U-238[*2]	Am-241	Cm-242	Cm-243 Cm-244
①Playground (west-northwest approx. 500m)	June 6/ Japan Chemical Analysis Center	(1.7±0.14) ×10^{-1}	(6.6±0.80) ×10^{-2}	(8.0+0.41) ×10^{0}	(3.8±0.72) ×10^{-1}	(8.8±0.44) ×10^{0}	(3.4±0.74) ×10^{-2}	(1.7+0.083) ×10^{0}	(1.1±0.14) ×10^{-1}
②Adjacent to industrial waste disposal facility (south-southwest approx. 500m)		(6.7±0.91) ×10^{-2}	(2.6±0.54) ×10^{-2}	(5.9±0.36) ×10^{0}	(2.9±0.70) ×10^{-1}	(5.7±0.35) ×10^{0}	(2.2±0.55) ×10^{-2}	(1.1+0.052) ×10^{0}	(4.1±0.75) ×10^{-2}
Average nuclide concentration ratio of Unit 1～3 (ratio in case Pu-238 as 1) [*3]		1	－	－	－	－	0．1	10	1

*1：Announced on June 22, 2011　*2：Announced on July 7, 2011　*3：Calculated value by ORIGEN code (Approximate figure)

2. Evaluation

Detected Am and CM can be considered to be caused by the nuclear accident of this time.

- Nuclide of Cm-242/Cm-243/Cm-244 do not exist in the natural world and especially, Cm-242 (half-life：approx. 160 days) , which has relatively short half-life be detected.
- Concentration ratio of each nuclide (Am-241/Cm-242/Cm-243,Cm-244) against sampling number① and ② of Pu-238 is almost as same as the average composition ratio of Unit 1～3.

  Sampling number①　Pu-238:(Am-241/Cm-242/Cm-243,Cm-244)　1：(0.2/10/0.6)

  Sampling number②　Pu-238:(Am-241/Cm-242/Cm-243,Cm-244)　1：(0.3/16/0.6)

END