

**“Nuclide analysis result of radioactive materials in the soil of Fukushima Daiichi Nuclear Power Station (26th release)”**  
**(released on July 29<sup>th</sup>, 2011)**

( Attachment 3 )

**Wrong**

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 <sup>*1</sup>	Pu-239 <sup>*1</sup> 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
Playground ( west-northwest approx. 500m )	June 6/ Japan Chemical Analysis Center	( 1.7±0. 14 ) ×10 <sup>-1</sup>	(6.6±0.80) ×10 <sup>-2</sup>	(8.0±0.41) ×10 <sup>0</sup>	(3.8±0.72) ×10 <sup>-1</sup>	(8.8±0.44) ×10 <sup>0</sup>	(3.4±0.74) ×10 <sup>-2</sup>	(1.7±0.083) ×10 <sup>0</sup>	(1.1±0.14) ×10 <sup>-1</sup>
Adjacent to industrial waste disposal facility ( south-southwest approx. 500m )		(6.7±0.91) ) ×10 <sup>-2</sup>	(2.6±0.54) ×10 <sup>-2</sup>	(5.9±0.36) ×10 <sup>0</sup>	(2.9±0.70) ×10 <sup>-1</sup>	(5.7±0.35) ×10 <sup>0</sup>	(2.2±0.55) ×10 <sup>-2</sup>	(1.1±0.052) ×10 <sup>0</sup>	(4.1±0.75) ×10 <sup>-2</sup>
Average nuclide concentration ratio of Unit 1 ~ 3 (ratio in case Pu-238 as 1 ) <sup>*3</sup>		1	-	-	-	-	0 . 1	1 0	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.

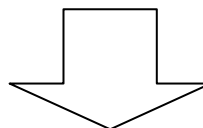
• Nuclide of Cm-242/Cm-243/Cm-244 do not exist in the natural world and especially, Cm-242 ( half-life : approx. 160 days ) , which has relatively short half-life be detected.

• Concentration ratio of each nuclide ( Am-241/Cm-242/Cm-243,Cm-244 ) against sampling number and of Pu-238 is almost as same as the average composition ratio of Unit 1 ~ 3.

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

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

END



Wrong: + → Correct: ±

**Correct**

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Playground( west-northwest approx. 500m )	June 6/ Japan Chemical	( 1.7±0. 14 ) ×10 <sup>-1</sup>	(6.6±0.80) ×10 <sup>-2</sup>	(8.0±0.41) ×10 <sup>0</sup>	(3.8±0.72) ×10 <sup>-1</sup>	(8.8±0.44) ×10 <sup>0</sup>	(3.4±0.74) ×10 <sup>-2</sup>	(1.7 ± 0.083) ×10 <sup>0</sup>	(1.1±0.14) ×10 <sup>-1</sup>
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