

Result of Pu nuclide analysis in the soil Fukushima Daiichi Nuclear Power Station

1. Result analysis

(Unit : Bq/kg·dry soil)

Place of sampling () shows distance from stuck of Unit 1/2	Date Analysis institute	Pu-238	Pu-239,Pu-240
Ground (WNW approx. 500m)	February 20 Japan Chemical Analysis Center	(1.6±0.14) ×10 ⁻¹	(4.7±0.70) ×10 ⁻²
Yachounomori (W approx. 500m)		N.D. [$<1.3 \times 10^{-2}$]	(3.5±0.65) ×10 ⁻²
Around industrial waste treatment facility (SSW approx. 500m)		(4.6±0.74) ×10 ⁻²	(2.6±0.55) ×10 ⁻²
Domestic soil		N.D. ~ 1.5×10 ⁻¹	N.D. ~ 4.5

[]shows lower detection limit

: Source: Ministry of Education, Culture, Sports, Science and Technology "Environmental radiation data base" from 1978 to 2008

: Place of sampling for " Ground" and " Around industrial waste treatment facility" has slightly changed to avoid duplication with past sampling and as for " Yachounomori", it was taken at the same point in depth direction (sampling point will be changed if sampling was not feasible).

2. Evaluation

Radioactive density of the Pu-238, Pu-239 and Pu-240 detected on February 20 was within the same level as that of fallout of past nuclear test in the atmosphere. However it is possible that the detected materials may be derived from the nuclear accident this time.

Though there are some samples where Pu-238, Pu-239 and Pu-240 were detected after March 21, 2011, there is no significant change in the figures.

End

Result of Sr nuclide analysis in the soil Fukushima Daiichi Nuclear Power Station

1. Result analysis

(Unit : Bq/kg·dry soil)

Place of sampling () shows distance from stuck of Unit 1/2	Date Analysis institute	Sr -89	Sr -90
Ground (WNW approx. 500m)	February 13 Japan Chemical Analysis Center	$(2.6 \pm 0.46) \times 10^1$	$(2.2 \pm 0.04) \times 10^2$
Yachounomori (W approx. 500m)		N.D.	$(5.7 \pm 0.71) \times 10^0$
Around industrial waste treatment facility (SSW approx. 500m)		$(1.3 \pm 0.11) \times 10^2$	$(9.1 \pm 0.08) \times 10^2$
Domestic soil		-	ND ~ 4.3

: Source: 2009 Report on the Result of Radioactivity Measurement around Nuclear Power Plant

: Place of sampling for “ Ground ” and “ Around industrial waste treatment facility ” has slightly changed to avoid duplication with past sampling and as for “ Yachounomori ”, it was taken at the same point in depth direction (sampling point will be changed if sampling was not feasible).

2. Evaluation

Radioactive density of the Sr-90 detected was higher than the level of fallout of past nuclear test in the atmosphere. It is considerable the result may be derived from the nuclear accident this time.