

Fukushima Daiichi Nuclear Power Station: Plutonium analysis result in the soil

1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot (): Distance from the stack of Unit 1, 2	Date of sampling/ Analyses organization	Pu-238	Pu-239, Pu-240
Playground (west-northwest approx. 500m)	May 16/ JCAC	$(1.3 \pm 0.13) \times 10^{-1}$	$(6.5 \pm 0.86) \times 10^{-2}$
Forest of wild birds (west approx. 500m)		N.D.	N.D.
Adjacent to industrial waste disposal facility (south-southwest approx. 500m)		$(3.8 \pm 0.60) \times 10^{-2}$	$(1.8 \pm 0.41) \times 10^{-2}$
Playground (west-northwest approx. 500m)	May 19/ JAEA	N.D.	N.D.
Forest of wild birds (west approx. 500m)		N.D.	N.D.
Adjacent to industrial waste disposal facility (south-southwest approx. 500m)		N.D.	N.D.
Playground (west-northwest approx. 500m)	May 23/ JCAC	$(1.5 \pm 0.13) \times 10^{-1}$	$(5.9 \pm 0.77) \times 10^{-2}$
Forest of wild birds (west approx. 500m)		N.D.	N.D.
Adjacent to industrial waste disposal facility (south-southwest approx. 500m)		$(1.0 \pm 0.11) \times 10^{-1}$	$(4.1 \pm 0.64) \times 10^{-2}$
Soil in Japan*		N.D. $\sim 1.5 \times 10^{-1}$	N.D. ~ 4.5

*: Ministry of Education, Culture, Sports, Science and Technology “Environmental Radiation Database, 1978 - 2008”

2. Evaluation

Density of Pu-238, Pu-239 and Pu-240 detected on May 16 and 23 are the same level as that of the measured fallouts in Japan in the cases of previous nuclear tests in the atmosphere. However, this can be considered to be caused by the nuclear accident of this time.

Meanwhile, in the “playground” , although Pu-238, Pu-239, and Pu-240 are detected from the samples taken on and after March 21, those values have not been greatly changed.

End