

The result of the nuclide analysis of radioactive materials in the air at the site of Fukushima Daiichi Nuclear Power Station

The result of the nuclide analysis of radioactive materials in the air in the site of Fukushima Daiichi Nuclear Power Station is as follows.

1. Conditions of collection and measurement

Collection of sample	Place	Fukushima Daiichi: Western Gate		
	Date	3/27 2:00~2:20		
	Manner of Collection	Collecting dust by monitoring cars		
	Wind direction & speed	S 0.5m/s (2:00)		
Measurement of Sample	Date	3/27 11:38~		
	Measuring method	Brought the sample to Fukushima Daiichi Nuclear Power Station and analyzed it by the analysis device of Germanium semi-conductor type nuclide		
	Measuring time	500s		

2. Result

(Data collected on March 28th)

	Nuclide	Collected on March 27th								③Density limit in the air to workers engaged in tasks associated with radiation (Bq/cm3)※
		① Radioactivity density (Bq/cm3)	②Detection limit density (Bq/cm3)	Ratio to density limit in the air (①/③)						
Volatile characteristics	Co-58	-	-	-						1.0E-02
	I-131	4.5E-04	8.2E-06	0.45						1.0E-03
	I-132	1.8E-04	1.3E-04	0.00						7.0E-02
	I-133	-	-	-						5.0E-03
	Cs-134	1.2E-05	6.4E-06	0.01						2.0E-03
	Cs-136	-	-	-						1.0E-02
	Cs-137	1.4E-05	6.2E-06	0.00						3.0E-03
Particulate characteristics	Co-58	-	-	-						1.0E-02
	I-131	2.1E-04	9.5E-06	0.21						1.0E-03
	I-132	-	-	-						7.0E-02
	Cs-134	1.6E-05	8.8E-06	0.01						2.0E-03
	Cs-136	-	-	-						1.0E-02
	Cs-137	1.4E-05	9.5E-06	0.00						3.0E-03
Other detected nuclide	Te-129	2.6E-02	2.2E-02	0.07						4.0E-01
	Te-129m	1.9E-04	1.5E-04	0.05						4.0E-03
	Te-132	1.2E-04	5.7E-06	0.02						7.0E-03

※ Statutory density limit to the 3-month average density of radioactive nuclide contained in the air that humans breathe

※ X.XE-X means $X.X \times 10^{-x}$