

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

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

1. Conditions of collection and measurement

Collection of sample	Place	Fukushima Daini MP-1	Fukushima Daini MP-1		
	Date	3/27 10:52~11:00	3/27 17:02~17:10		
	Manner of Collection	Collecting dust by monitoring cars	Collecting dust by monitoring cars		
	Wind direction & speed	—	—		
Measurement of sample	Date	2011/3/27 11:56~	2011/3/27 18:03~		
	Measuring method	Germanium semi-conductor type nuclide analysis	Germanium semi-conductor type nuclide analysis		
	Measuring time	500s	500s		

2. Result

collected on Mar 28th 2011

	Nuclide	Collected on Mar 27th①			Collected on Mar 27th②								③Density limit in the air to workers engaged in tasks associated with radiation (Bq/cm ³) ※
		① Radioactivity density (Bq/cm ³)	②Detection limit density (Bq/cm ³)	Ratio to density limit in the air (①/③)	① Radioactivity density (Bq/cm ³)	②Detection limit density (Bq/cm ³)	Ratio to density limit in the air (①/③)						
Volatile characteristics	Co-58	—	—	—	—	—	—						1.0E-02
	I-131	1.3E-04	1.3E-05	0.13	4.3E-05	1.9E-05	0.04						1.0E-03
	I-132	1.4E-04	1.6E-05	0.00	—	—	—						7.0E-02
	I-133	—	—	—	—	—	—						5.0E-03
	Cs-134	1.9E-05	1.0E-05	0.01	—	—	—						2.0E-03
	Cs-137	1.9E-05	9.5E-06	0.01	—	—	—						3.0E-03
Particulate characteristics	Co-58	—	—	—	—	—	—						1.0E-02
	I-131	7.3E-05	1.6E-05	0.07	7.6E-05	6.4E-06	0.08						1.0E-03
	I-132	3.2E-05	2.7E-05	—	6.3E-05	8.8E-06	0.00						7.0E-02
	Cs-134	2.3E-05	1.5E-05	0.01	9.9E-06	5.7E-06	0.00						2.0E-03
	Cs-136	—	—	—	—	—	—						1.0E-02
	Cs-137	1.6E-05	1.6E-05	0.01	—	—	—						3.0E-03
Other detected nuclide	Te-129	2.6E-04	2.2E-04	0.00	2.1E-04	1.1E-04	0.00						4.0E-01
	Te-129m	3.3E-04	2.2E-04	0.08	1.2E-04	1.1E-04	0.03						4.0E-03
	Te-132	1.9E-04	7.8E-06	0.03	7.5E-05	3.7E-06	0.01						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 x 10^{-x}