

Correct

* The documents distributed on November 2 was corrected as there were some errors.

November 17, 2011
Tokyo Electric Power Company

**Result of sampling of gas inside the primary containment vessel
of Unit 2 in Fukushima Daiichi Nuclear Power Station
(Sampling Date : October 28, 2011 15:26)**

【Place of Sampling】 : Unit 2 PCV gas sampling system intake
【Date of Sampling】 : Fri. October 28, 2011 15:26
【Measurement Result】 :

	Nuclide	Radioactive material density (Bq/cm ³)	Detection limits (Bq/cm ³)	Half-life (approx.)
Gas Vial	I-131	Below detection limits	2.1×10^{-1}	8 days
	Cs-134	Below detection limits	4.9×10^{-1}	2 years
	Cs-137	7.6×10^{-1}	5.4×10^{-1}	30 years
	Kr-85	Below detection limits	4.2×10^1	11 years
	Xe-131m	Below detection limits	5.4×10^0	12 days
	Xe-133	Below detection limits	3.6×10^{-1}	5 days
	Xe-135	Below detection limits	1.6×10^{-1}	9 hours

Error

**Result of sampling of gas inside the primary containment vessel
of Unit 2 in Fukushima Daiichi Nuclear Power Station
(Sampling Date : October 28, 2011 15:26)**

【Place of Sampling】 Unit 2 PCV gas sampling system intake

【Date of Sampling】 Friday October 28, 2011 15:26

【Measurement Result】 Data of major nuclides
and radioactive material density are as follows

Nuclide		Radioactive material density (Bq/cm ³)	Detection limits (Bq/cm ³)	Half-life
Gas	I-131	Below detection limits	1.8×10^{-1}	about 8 days
	Cs-134	Below detection limits	4.4×10^{-1}	about 2 years
	Cs-137	6.7×10^{-1}	4.8×10^{-1}	about 30 years

【 Reference 】 under evaluation

Nuclide		Radioactive material density (Bq/cm ³)	Detection limits (Bq/cm ³)	Half-life
Gas	Kr-85	Below detection limits	3.6×10^1	about 11 years
	Xe-131m	Below detection limits	4.4×10^0	about 12 days
	Xe-133	Below detection limits	2.8×10^{-1}	about 5 days
	Xe-135	Below detection limits	1.4×10^{-1}	about 9 hours

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November 17, 2011

Result of sampling of gas inside the primary containment vessel of Unit 2 in Fukushima Daiichi Nuclear Power Station

Tokyo Electric Power Company

【Place of Sampling】 : Unit 2 PCV gas sampling system, dust radiation monitor

【Date】 : 13:51 - 14:20 on Tue. November 1, 2011 (charcoal filter)

14:20 - 14:32 on Tue. November 1, 2011 (particle filter)

	Nuclide	Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)	Half life period (approx.)
Particle filter	I-131	Below detection limit	2.2×10^{-6}	8 days
	Cs-134	2.3×10^{-5}	5.8×10^{-6}	2 years
	Cs-137	3.6×10^{-5}	6.1×10^{-6}	30 years

	Nuclide	Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)	Half life period (approx.)
Charcoal filter	I-131	Below detection limit	4.2×10^{-6}	8 days
	Cs-134	4.6×10^{-6}	3.6×10^{-6}	2 years
	Cs-137	6.6×10^{-6}	4.1×10^{-6}	30 years
	Kr-85	7.9×10^2	1.4×10^0	11 years
	Xe-131m	1.2×10^0	2.4×10^{-1}	12 days
	Xe-133	2.5×10^{-2}	2.4×10^{-2}	5 days
	Xe-135	2.1×10^{-2}	7.4×10^{-3}	9 hours

The radioactive density and detection limit of rare gases (Kr-85,Xe-131m,Xe-133,Xe-135) are evaluated by the result collected at the gas vial container of charcoal filter's rare gas capture ratio.

(Reference) The following are the values before evaluating by the rare gas capture ratio as of November 2

<u>Nuclide</u>	<u>Radioactive density (Bq/cm³)</u>	<u>Detection limit (Bq/cm³)</u>
Kr-85	4.4×10^{-1}	7.6×10^{-4}
Xe-131m	6.9×10^{-4}	1.3×10^{-5}
Xe-133	1.4×10^{-5}	1.3×10^{-5}
Xe-135	1.2×10^{-5}	4.1×10^{-6}

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November 10, 2011

Tokyo Electric Power Company

Result of sampling of gas inside the primary containment vessel of Unit 2 in Fukushima Daiichi Nuclear Power Station

【 Place of Sampling 】 : Unit 2 PCV gas sampling system, dust radiation monitor

【 Date 】 : 13:51 - 14:20 on Tue. November 1, 2011 (charcoal filter)

14:20 - 14:32 on Tue. November 1, 2011 (particle filter)

	Nuclide	Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)	Half life period (approx.)
Particle filter	I-131	Below detection limit	2.2 x 10 ⁻⁶	8 days
	Cs-134	2.3 x 10 ⁻⁵	5.8 x 10 ⁻⁶	2 years
	Cs-137	3.6 x 10 ⁻⁵	6.1 x 10 ⁻⁶	30 years

	Nuclide	Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)	Half life period (approx.)
Charcoal filter	I-131	Below detection limit	4.2 x 10 ⁻⁶	8 days
	Cs-134	4.6 x 10 ⁻⁶	3.6 x 10 ⁻⁶	2 years
	Cs-137	6.6 x 10 ⁻⁶	4.1 x 10 ⁻⁶	30 years
	Kr-85	6.8 x 10 ²	1.2 x 10 ⁰	11 years
	Xe-131m	1.1 x 10 ⁰	2.1 x 10 ⁻¹	12 days
	Xe-133	2.2 x 10 ⁻²	2.1 x 10 ⁻²	5 days
	Xe-135	1.9 x 10 ⁻²	6.4 x 10 ⁻³	9 hours

The radioactive density and detection limit of rare gases (Kr-85,Xe-131m,Xe-133,Xe-135) are evaluated by the result collected at the gas vial container of charcoal filter's rare gas capture ratio.

(Reference) The following are the values before evaluating by the rare gas capture ratio as of November 2

<u>Nuclide</u>	<u>Radioactive density (Bq/cm³)</u>	<u>Detection limit (Bq/cm³)</u>
Kr-85	4.4 x 10 ⁻¹	7.6 x 10 ⁻⁴
Xe-131m	6.9 x 10 ⁻⁴	1.3 x 10 ⁻⁵
Xe-133	1.4 x 10 ⁻⁵	1.3 x 10 ⁻⁵
Xe-135	1.2 x 10 ⁻⁵	4.1 x 10 ⁻⁶

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November 17, 2011

Tokyo Electric Power Company

**Result of sampling of gas inside the primary containment vessel
of Unit 2 in Fukushima Daiichi Nuclear Power Station
(Re-measurement of November 1 sample)**

【Place of Sampling】 : Unit 2 PCV gas sampling system, dust radiation monitor

【Date】 : 13:51 - 14:20 on Tue. November 1, 2011

Nuclide		Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)	Half life period (approx.)
Charcoal filter	I-131	Below detection limit	1.8×10^{-6}	8 days
	Cs-134	Below detection limit	3.8×10^{-6}	2 years
	Cs-137	5.3×10^{-6}	4.2×10^{-6}	30 years
	Kr-85	6.5×10^0	5.6×10^{-1}	11 years
	Xe-131m	9.5×10^{-2}	7.5×10^{-2}	12 days
	Xe-133	1.2×10^{-2}	6.1×10^{-3}	5 days
	Xe-135	2.3×10^{-2}	9.7×10^{-3}	9 hours

The radioactive density and detection limit of rare gases (Kr-85,Xe-131m,Xe-133,Xe-135) are evaluated by the result collected at the gas vial container of charcoal filter's rare gas capture ratio.

(Reference) The following are the values before evaluating by the rare gas capture ratio as of November 2

<u>Nuclide</u>	<u>Radioactive density (Bq/cm³)</u>	<u>Detection limit (Bq/cm³)</u>
Kr-85	3.6×10^{-3}	3.1×10^{-4}
Xe-131m	5.3×10^{-4}	4.2×10^{-5}
Xe-133	6.5×10^{-5}	3.4×10^{-6}
Xe-135	1.3×10^{-5}	5.4×10^{-6}

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November 10, 2011

Tokyo Electric Power Company

Result of sampling of gas inside the primary containment vessel of Unit 2 in Fukushima Daiichi Nuclear Power Station (Re-measurement of November 1 sample)

【Place of Sampling】 : Unit 2 PCV gas sampling system, dust radiation monitor

【Date】 : 13:51 - 14:20 on Tue. November 1, 2011

Nuclide		Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)	Half life period (approx.)
Charcoal filter	I-131	Below detection limit	1.8 x 10 ⁻⁶	8 days
	Cs-134	Below detection limit	3.8 x 10 ⁻⁶	2 years
	Cs-137	5.3 x 10 ⁻⁶	4.2 x 10 ⁻⁶	30 years
	Kr-85	5.7 x 10 ⁰	4.9 x 10 ⁻¹	11 years
	Xe-131m	8.2 x 10 ⁻¹	6.5 x 10 ⁻²	12 days
	Xe-133	1.0 x 10 ⁻²	5.3 x 10 ⁻³	5 days
	Xe-135	2.0 x 10 ⁻²	8.4 x 10 ⁻³	9 hours

The radioactive density and detection limit of rare gases (Kr-85,Xe-131m,Xe-133,Xe-135) are evaluated by the result collected at the gas vial container of charcoal filter's rare gas capture ratio.

(Reference) The following are the values before evaluating by the rare gas capture ratio as of November 2

<u>Nuclide</u>	<u>Radioactive density (Bq/cm³)</u>	<u>Detection limit (Bq/cm³)</u>
Kr-85	3.6 x 10 ⁻³	3.1 x 10 ⁻⁴
Xe-131m	5.3 x 10 ⁻⁴	4.2 x 10 ⁻⁵
Xe-133	6.5 x 10 ⁻⁵	3.4 x 10 ⁻⁶
Xe-135	1.3 x 10 ⁻⁵	5.4 x 10 ⁻⁶

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November 17, 2011
Tokyo Electric Power Company

**Result of sampling of gas inside the primary containment vessel
of Unit 2 in Fukushima Daiichi Nuclear Power Station**

【Place of Sampling】 : Unit 2 PCV gas sampling system, dust radiation monitor
【Date】 : 11:59 - 12:29 on Wed. November 2, 2011

Nuclide		Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)	Half life period (approx.)
Charcoal filter	I-131	Below detection limit	4.4 x 10 ⁻⁶	8 days
	Cs-134	7.9 x 10 ⁻⁶	3.8 x 10 ⁻⁶	2 years
	Cs-137	Below detection limit	4.0 x 10 ⁻⁶	30 years
	Kr-85	9.5 x 10 ²	1.3 x 10 ⁰	11 years
	Xe-131m	1.1 x 10 ⁰	2.9 x 10 ⁻¹	12 days
	Xe-133	Below detection limit	2.8 x 10 ⁻²	5 days
	Xe-135	3.1 x 10 ⁻²	7.8 x 10 ⁻³	9 hours

The radioactive density and detection limit of rare gases (Kr-85,Xe-131m,Xe-133,Xe-135) are evaluated by the result collected at the gas vial container of charcoal filter's rare gas capture ratio.

(Reference) The following are the values before evaluating by the rare gas capture ratio as of November 2

Nuclide	Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)
Kr-85	5.3 x 10 ⁻¹	7.2 x 10 ⁻⁴
Xe-131m	6.1 x 10 ⁻⁴	1.6 x 10 ⁻⁴
Xe-133	Below detection limit	1.5 x 10 ⁻⁵
Xe-135	1.7 x 10 ⁻⁵	4.3 x 10 ⁻⁶

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November 17, 2011

Tokyo Electric Power Company

Result of sampling of gas inside the primary containment vessel of Unit 2 in Fukushima Daiichi Nuclear Power Station

【Place of Sampling】 : Unit 2 PCV gas sampling system, dust radiation monitor

【Date】 : 11:59 - 12:29 on Wed. November 2, 2011

Nuclide		Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)	Half life period (approx.)
Charcoal filter	I-131	Below detection limit	4.4 x 10 ⁻⁶	8 days
	Cs-134	7.9 x 10 ⁻⁶	3.8 x 10 ⁻⁶	2 years
	Cs-137	Below detection limit	4.0 x 10 ⁻⁶	30 years
	Kr-85	8.3 x 10 ²	1.1 x 10 ⁰	11 years
	Xe-131m	9.5 x 10 ⁻¹	2.5 x 10 ⁻¹	12 days
	Xe-133	Below detection limit	2.4 x 10 ⁻²	5 days
	Xe-135	2.7 x 10 ⁻²	6.8 x 10 ⁻³	9 hours

The radioactive density and detection limit of rare gases (Kr-85,Xe-131m,Xe-133,Xe-135) are evaluated by the result collected at the gas vial container of charcoal filter's rare gas capture ratio.

(Reference) The following are the values before evaluating by the rare gas capture ratio as of November 2

Nuclide	Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)
Kr-85	5.3 x 10 ⁻¹	7.2 x 10 ⁻⁴
Xe-131m	6.1 x 10 ⁻⁴	1.6 x 10 ⁻⁴
Xe-133	Below detection limit	1.5 x 10 ⁻⁵
Xe-135	1.7 x 10 ⁻⁵	4.3 x 10 ⁻⁶

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November 17, 2011
Tokyo Electric Power Company

**Result of sampling of gas inside the primary containment vessel
of Unit 2 in Fukushima Daiichi Nuclear Power Station**

【Place of Sampling】 : Unit 2 PCV gas sampling system intake
【Date of Sampling】 : Mon. November 14, 2011 13:42
【Measurement Result】 :

Nuclide		Radioactive material density (Bq/cm ³)	Detection limits (Bq/cm ³)	Half-life (approx.)
Gas Vial	I-131	Below detection limits	1.3×10^{-1}	8 days
	Cs-134	5.8×10^{-1}	3.4×10^{-1}	2 years
	Cs-137	8.1×10^{-1}	3.8×10^{-1}	30 years
	Kr-85	Below detection limits	3.0×10^1	11 years
	Xe-131m	Below detection limits	4.0×10^0	12 days
	Xe-133	Below detection limits	3.1×10^{-1}	5 days
	Xe-135	Below detection limits	1.1×10^{-1}	9 hours

Short half-life Xe were below detection limits in any case.
less than criterion of re-criticality, 1 Bq/cm³ (Xe-135)

Error

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November 15, 2011
Tokyo Electric Power Company

Result of sampling of gas inside the primary containment vessel of Unit 2 in Fukushima Daiichi Nuclear Power Station

【Place of Sampling】 : Unit 2 PCV gas sampling system intake
【Date of Sampling】 : Mon. November 14, 2011 13:42
【Measurement Result】 :

	Nuclide	Radioactive material density (Bq/cm ³)	Detection limits (Bq/cm ³)	Half-life (approx.)
Gas Vial	I-131	Below detection limits	1.1×10^{-1}	8 days
	Cs-134	5.2×10^{-1}	3.0×10^{-1}	2 years
	Cs-137	7.1×10^{-1}	3.4×10^{-1}	30 years
	Kr-85	Below detection limits	2.6×10^1	11 years
	Xe-131m	Below detection limits	3.2×10^0	12 days
	Xe-133	Below detection limits	2.5×10^{-1}	5 days
	Xe-135	Below detection limits	$9.2. \times 10^{-2}$	9 hours

Short half-life Xe were below detection limits in any case.
less than criterion of re-criticality, 1 Bq/cm³ (Xe-135)

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**Result of sampling of gas inside the primary containment vessel
of Unit 2 in Fukushima Daiichi Nuclear Power Station**

【Place of Sampling】 : Unit 2 PCV gas sampling system outlet
【Date of Sampling】 : Mon. November 14, 2011 12:26
【Measurement Result】 :

Nuclide		Radioactive material density (Bq/cm ³)	Detection limits (Bq/cm ³)	Half-life (approx.)
Gas Vial	I-131	Below detection limits	1.4×10^{-1}	8 days
	Cs-134	8.9×10^{-1}	3.4×10^{-1}	2 years
	Cs-137	9.0×10^{-1}	3.9×10^{-1}	30 years
	Kr-85	7.2×10^1	3.0×10^1	11 years
	Xe-131m	Below detection limits	4.1×10^0	12 days
	Xe-133	Below detection limits	2.5×10^{-1}	5 days
	Xe-135	Below detection limits	1.1×10^{-1}	9 hours

Data is treated as reference since the value at the outlet was higher than that at intake.

Error

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November 15, 2011
Tokyo Electric Power Company

Result of sampling of gas inside the primary containment vessel of Unit 2 in Fukushima Daiichi Nuclear Power Station

【Place of Sampling】 : Unit 2 PCV gas sampling system outlet
【Date of Sampling】 : Mon. November 14, 2011 12:26
【Measurement Result】 :

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Gas Vial	I-131	Below detection limits	1.2×10^{-1}	8 days
	Cs-134	7.9×10^{-1}	3.0×10^{-1}	2 years
	Cs-137	8.0×10^{-1}	3.4×10^{-1}	30 years
	Kr-85	6.2×10^1	2.6×10^1	11 years
	Xe-131m	Below detection limits	3.3×10^0	12 days
	Xe-133	Below detection limits	2.0×10^{-1}	5 days
	Xe-135	Below detection limits	9.0×10^{-2}	9 hours

Data is treated as reference since the value at the outlet was higher than that at intake.

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November 17, 2011

**Result of sampling of gas inside the primary containment vessel
of Unit 2 in Fukushima Daiichi Nuclear Power Station**

Tokyo Electric Power Company

【Date of Sampling】 : 11:45 - 11:55 on Mon. November 14, 2011 (particle filter)
11:56 - 12:26 on Mon. November 14, 2011 (charcoal filter)

	Nuclide	Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)	Half life period (approx.)
Particle filter	I-131	Below detection limit	3.1×10^{-6}	8 days
	Cs-134	1.4×10^{-5}	7.7×10^{-6}	2 years
	Cs-137	2.5×10^{-5}	8.3×10^{-6}	30 years
Charcoal filter	I-131	Below detection limit	2.9×10^{-6}	8 days
	Cs-134	4.7×10^{-6}	3.4×10^{-6}	2 years
	Cs-137	6.5×10^{-6}	3.8×10^{-6}	30 years
	Kr-85	7.2×10^1	2.0×10^{-1}	11 years
	Xe-131m	4.1×10^{-2}	3.3×10^{-2}	12 days
	Xe-133	Below detection limit	3.8×10^{-3}	5 days
	Xe-135	5.3×10^{-3}	1.1×10^{-3}	9 hours

The radioactive density and detection limit of rare gases (Kr-85,Xe-131m,Xe-133,Xe-135) are evaluated by the result collected at the gas vial container of charcoal filter's rare gas capture ratio.

(Reference) The following are the values before evaluating by the rare gas capture ratio as of November 2

<u>Nuclide</u>	<u>Radioactive density (Bq/cm³)</u>	<u>Detection limit (Bq/cm³)</u>
Kr-85	1.8×10^{-1}	5.2×10^{-4}
Xe-131m	1.0×10^{-4}	8.5×10^{-5}
Xe-133	Below detection limit	9.7×10^{-6}
Xe-135	1.4×10^{-5}	2.7×10^{-6}

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November 15, 2011

Result of sampling of gas inside the primary containment vessel of Unit 2 in Fukushima Daiichi Nuclear Power Station Tokyo Electric Power Company

【Date of Sampling】 : 11:45 - 11:55 on Mon. November 14, 2011 (particle filter)
11:56 - 12:26 on Mon. November 14, 2011 (charcoal filter)

【Measurement Result】 :

	Nuclide	Radioactive density (Bq/cm ³)	Detection limit (Bq/cm ³)	Half life period (approx.)
Particle filter	I-131	Below detection limit	3.1×10^{-6}	8 days
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Charcoal filter	I-131	Below detection limit	2.9×10^{-6}	8 days
	Cs-134	4.7×10^{-6}	3.4×10^{-6}	2 years
	Cs-137	6.5×10^{-6}	3.8×10^{-6}	30 years
	Kr-85	6.2×10^1	1.8×10^{-1}	11 years
	Xe-131m	3.5×10^{-2}	2.9×10^{-2}	12 days
	Xe-133	Below detection limit	3.3×10^{-3}	5 days
	Xe-135	4.6×10^{-3}	9.4×10^{-4}	9 hours

The radioactive density and detection limit of rare gases (Kr-85,Xe-131m,Xe-133,Xe-135) are evaluated by the result collected at the gas vial container of charcoal filter's rare gas capture ratio.

(Reference) The following are the values before evaluating by the rare gas capture ratio as of November 2

<u>Nuclide</u>	<u>Radioactive density (Bq/cm³)</u>	<u>Detection limit (Bq/cm³)</u>
Kr-85	1.8×10^{-1}	5.2×10^{-4}
Xe-131m	1.0×10^{-4}	8.5×10^{-5}
Xe-133	Below detection limit	9.7×10^{-6}
Xe-135	1.4×10^{-5}	2.7×10^{-6}