Reference

Nuclides Analysis Result of the Radioactive Materials in the Seawater
< Coast, Fukushima Daiichi Nuclear Power Station >

(Data summarized on November 21)

Place of Sampling	North of Unit 5-6 Discharge Channel at Fukushima Daiichi NPS (Approx. 30m North of Unit 5-6 Discharge Channel)		Around South Discharge Channel of Fukushima Daiichi NPS (Appox. 330m South of Unit 1-4 Discharge Channel)		② Density Limit Specified by the Reactor Regulation (Bq/L) (The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.)
Time of Sampling	Nov 20, 2012 8:15 AM		Nov 20, 2012 8:00 AM		
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
I-131 (Approx. 8 days)	ND	-	ND	-	40
Cs-134 (Approx. 2 years)	ND	-	ND	-	60
Cs-137 (Approx. 30 years)	ND	-	ND	-	90

* The density specified by the Reactor Regulation is converted from Bq/cm^3 to Bq/L.
* Data of other nuclides is under evaluation.
* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.
* "ND" indicates that the measurement result is below the detection limit.
  I-131: Approx. 0.46Bq/L, Cs-134: Approx.1.1Bq/L, Cs-137: Approx.1.5Bq/L
  As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

Analysis Result of Pu in the Seawater

1. Measurement Result:

(Unit: Bq/L)

Place of Sampling	Date	Pu-238	Pu-239+Pu-240
15km Offshore of Fukushima Daiichi NPS, Upper Layer	September 11, 2012	N.D. [$<4.9\times10^{-6}$]	$(4.7\pm1.5)\times10^{-6}$
Around 3km Offshore of Ukedo River, Upper Layer	September 4, 2012	N.D. [$<7.0\times10^{-6}$]	N.D. [$<6.2\times10^{-6}$]
3km Offshore of Fukushima Daiichi NPS, Upper Layer	September 10, 2012	N.D. [$<5.2\times10^{-6}$]	N.D. [$<5.5\times10^{-6}$]
3km Offshore of Fukushima Daini NPS, Upper Layer	September 5, 2012	N.D. [$<4.6\times10^{-6}$]	N.D. [$<4.2\times10^{-6}$]
The range of the past measurement results obtained in the ocean near Fukushima Daiichi and Daini Nuclear Power Stations (FY2001 - FY2008)*		—	ND～1.3×10^{-5}

[ ] shows below the detection limit.

*: Source "Report on the environmental radioactivity measurement arround the Nuclear Power Plant (2008)", Committee on the safty technology of Nuclear Power Plants in Fukushima.

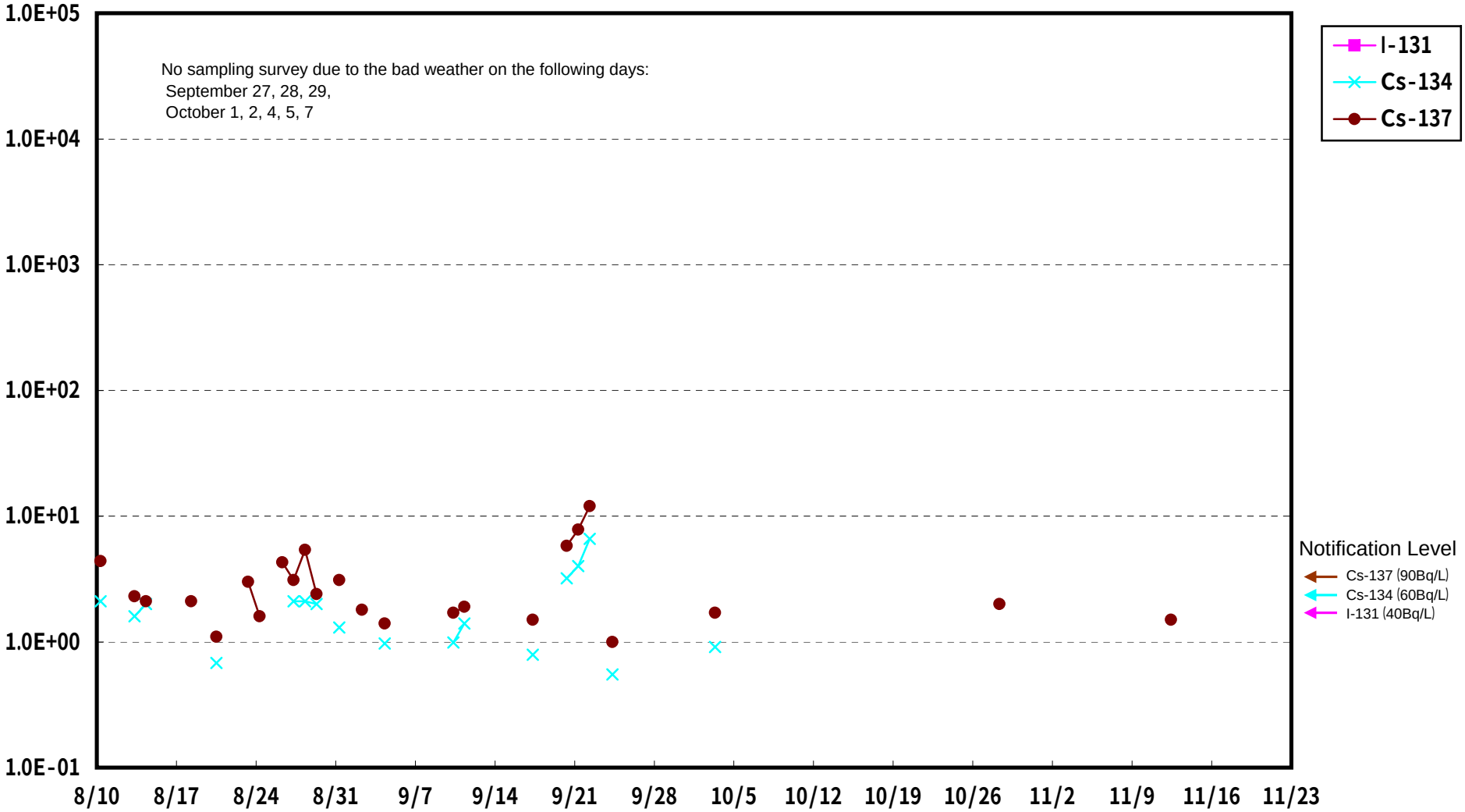
2. Analytical Institution: Japan Chemical Analysis Center

3. Evaluation:

Given that the density level of Pu-239+Pu-240 detected at 15km Offshore of Fukushima Daiichi Nuclear Power Station (Upper Layer) on September 11, 2012 is within the range of the past density measurements conducted along the seacoasts of 1F and 2F, it cannot be stated with absolute certainty that the presence of these particles is due to the accident.

End

Radioactivity Density of the Seawater at the North of 1F Unit 5-6 Discharge Channel (Bq/L)



Radioactivity Density of the Seawater at 1F South Discharge Channel (Bq/L)