F1 Issues

As of 25 March, 2014 Nuclear Regulation Authority (NRA), Japan

Current Information on Radioactivity in Seawater

The sampling points T-1 and T-2-1 near Fukushima Daiichi Nuclear Power Station are sentinels to assess effects on the environment by incidents including a leakage of contaminated water.

The concentrations of Cs-134, Cs-137, total Beta and H-3 were relatively stable at the sampling point T-2-1 from 16 to 22 March 2014 as well as those of total Beta and H-3 at the sampling point T-1 in the same period. Those of Cs-134 and Cs-137 at the sampling point T-1 indicated a temporary elevation (on 16 and 17 March), and on the following days, they turned to the low level as seen in F1 Issues disseminated so far.

The following URL of the NRA website leads to details of monitoring results: http://radioactivity.nsr.go.jp/en/contents/9000/8173/24/Sea_Area_Monitoring_20140325.pdf



1.1km northern point (T-1) from the outlet for Reactor Units 1 to 4

Sampling Date in 2014	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Total Beta (Bq/L)	H-3 (Bq/L)
16 March	1.7	5.2	_	-
17 March	1.3	4.5	13	2.1
18 March	ND(0.62)	0.68	-	-
19 March	ND(0.79)	1.0	-	-
20 March	ND(0.78)	ND(0.69)	-	-
21 March	ND(0.74)	ND(0.70)	-	—
22 March	ND(0.78)	ND(0.72)	_	_

1.3km southern point (T-2-1) from the outlet for Reactor Units 1 to 4

Sampling Date in 2014	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Total Beta (Bq/L)	H-3 (Bq/L)
16 March	ND(0.66)	ND(0.67)	13	-
17 March	ND(0.78)	ND(0.69)	12	ND(1.6)
18 March	ND(0.81)	ND(0.64)	12	-
19 March	ND(0.81)	ND(0.58)	10	-
20 March	ND(0.65)	ND(0.57)	8.5	-
21 March	ND(0.85)	1.0	7.5	_
22 March	ND(0.71)	ND(0.71)	11	-

ND: Under the limit of detection

The concentrations of Cs-134 and Cs-137 monitored at the sampling points T-1 and T-2-1 from 10 December 2013 to 22 March 2014 are shown into the following figures. The values under the limit of detection are not plotted on the figures. And seawater samples are taken by TEPCO every day except for the days of bad weather.



Sampling point: T-1



Sampling point: T-2-1

*The scale is set taking into account the limit values of concentrations (e.g., 60 Bq/L for Cs-134, 90 Bq/L for Cs-137, 60,000 Bq/L for H-3) in water for release of radioactive materials from a nuclear facility to the environment, which have been based on Japan's Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors as well as the standpoints of International Commission on Radiological Protection (ICRP).

The concentrations of Sr-90 monitored at the sampling points T-1 and T-2-1 from December 2012 to January 2014 are shown into the following figures. Seawater samples are taken by TEPCO once a month. The figures indicate that the Sr-90 level has remained below the limit value* of Sr-90 concentration.



Sampling point: T-1

Sampling point: T-2-1



*The scale is set taking into account the limit values of concentrations (e.g., 30 Bq/L for Sr-90) in water for release of radioactive materials from a nuclear facility to the environment, which have been based on Japan's Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors as well as the standpoints of International Commission on Radiological Protection (ICRP).

High Level Meeting with TEPCO

For the purpose of enhancing communications between the NRA and TEPCO, on 20 March 2014, NRA Chairperson Mr. Shunichi Tanaka, Commissioners Mr. Toyoshi Fuketa and Ms. Kayoko Nakamura met TEPCO President Mr. Naomi Hirose, Executive Vice President Mr. Zengo Aizawa and Mr. Naohiro Masuda who will be President of Decommissioning Company (tentatively named at this time) which will be established by TEPCO on 1 April 2014.

TEPCO explained its improvement progress in the issues of contaminated water treatment, radiation protection measures for the workers on site and others at Fukushima Daiichi Nuclear Power Station.

The NRA acknowledged some improvement progress and underlined the importance of disseminating information (e.g., "F1 Issues") to the public in a proactive and prompt manner. "F1 Issues" has been continuously disseminated to international communities by the NRA and has gained their credibility furthermore.

And the NRA requested TEPCO:

- To make sufficient investment for further enhancement of safety on site (e.g., prevention of contaminated water leakage);
- To improve work environment on site for the workers (e.g., enhancement of radiation protection measures); and
- To keep close communications between the NRA and TEPCO at a high level.

The NRA keeps close eyes on TEPCO's further progress in the issues of contaminated water treatment, radiation protection measures for the workers on site and others at Fukushima Daiichi Nuclear Power Station.



From left to right: Mr. Naohiro Masuda (President of Decommissioning Company), Mr. Zengo Aizawa (TEPCO Executive Vice President), Mr. Naomi Hirose (TEPCO President), Mr. Katsuhiko Ikeda (NRA Secretary-General), Mr. Tetsuya Yamamoto (NRA Director-General for Nuclear Regulation), Mr. Shunichi Tanaka (NRA Chairperson), Mr. Toyoshi Fuketa (Commissioner) and Ms. Kayoko Nakamura (Commissioner).

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