

## (News Release)

# The Results of Radioactive Material Monitoring of the Surface Water Bodies within Fukushima Prefecture (3<sup>rd</sup> Time)

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In accordance with the Comprehensive Radiation Monitoring Plan determined by the Monitoring Coordination Meeting, the Ministry of the Environment (MOE) is continuing to monitor radioactive materials in water environments (surface water bodies (rivers, lakes and headwaters, and coasts), etc.).

Samples taken from the surface water bodies of Fukushima Prefecture during the period of January 5-27 (3<sup>rd</sup> time) have been measured as part of MOE's efforts to monitor radioactive materials; the results have recently been compiled and are released here.

The monitoring results of radioactive materials in surface water bodies carried out to date can be found at the following web page: <http://www.env.go.jp/jishin/rmp.html#monitoring>

### 1. Survey Overview

#### (1) Survey Locations

179 environmental reference points, etc. in the surface water bodies within Fukushima Prefecture  
(Rivers: 113 locations, Lakes and headwaters: 32 locations, Coasts and bathing areas: 34 locations)

#### (2) Survey Method

- Measurement of concentrations of radioactive materials (radioactive iodine (I-131), radioactive cesium (Cs-134 and Cs-137)) in water and sediment
- Measurement of concentrations of radioactive materials and spatial dose-rate in soil in the surrounding environment of water and sediment sample collection points (river terraces, etc.)

### 2. Outline of Results (\* denotes the results of the previous survey.)

#### (1) Water Quality

- Radioactive iodine (I-131) Not detectable (ND) at any location (Lower detection limit: 1Bq/L)

(\* ND at any location)

- Radioactive cesium

(Rivers)

Cs-134: ND-3Bq/L (Lower detection limit: 1Bq/L)

Cs-137: ND-5Bq/L (Lower detection limit: 1Bq/L)

(\*Cs-134: ND-3Bq/L, Cs-137: ND-4Bq/L)

(Lakes and headwaters) ND at any location (Lower detection limit: 1Bq/L)

(\* ND at any location)

(Coasts and bathing areas) ND at any location (Lower detection limit: 1Bq/L)

(\* ND at any location)

#### <Reference>

“Regulatory Guide: Emergency Preparedness for Nuclear Facilities (Nuclear Safety Commission)”

Standards for Restrictions on the Intake of Food and Drink (Drinking Water)

Radioactive iodine (I-131): 300Bq/kg or more

Radioactive cesium (total for Cs-134 + Cs-137): 200Bq/kg or more

(2) Sediment

- Radioactive iodine (I-131) ND at any location (Lower detection limit: 30Bq/kg (dried mud))  
(\* ND at any location)
- Radioactive cesium
  - (Rivers)  
Cs-134: ND-22,000Bq/kg (dried mud) (Lower detection limit: 10Bq/kg (dried mud))  
Cs-137: ND-30,000Bq/kg (dried mud) (Lower detection limit: 10Bq/kg (dried mud))  
(\*Cs-134: ND-38,000Bq/kg, Cs-137: ND-49,000Bq/kg)
  - (Lakes and headwaters)  
Cs-134: ND-35,000Bq/kg (dried mud) (Lower detection limit: 10Bq/kg (dried mud))  
Cs-137: 17-45,000Bq/kg (dried mud)  
(\*Cs-134: ND-31,000Bq/kg), Cs-137: ND-38,000Bq/kg)
  - (Coasts and bathing areas)  
Cs-134: ND-500Bq/kg (dried mud) (Lower detection limit: 10Bq/kg (dried mud))  
Cs-137: ND-740Bq/kg (dried mud) (Lower detection limit: 10Bq/kg (dried mud))  
(\*Cs-134: ND-270Bq/kg, Cs-137: ND-360Bq/kg)

(3) Surrounding Environment

- Radioactive iodine (I-131) ND at any location (Lower detection limit: 30Bq/kg (dry))
- Radioactive cesium
  - (Rivers)  
Cs-134: ND-67,000Bq/kg (dry) (Lower detection limit: 10Bq/kg (dry))  
Cs-137: ND-87,000Bq/kg (dry) (Lower detection limit: 10Bq/kg (dry))  
(\*Cs-134: ND-49,000Bq/kg , Cs-137: ND-65,000Bq/kg)
  - (Lakes and headwaters)  
Cs-134: 130-64,000Bq/kg (dry)  
Cs-137: 160-83,000Bq/kg (dry)  
(\*Cs-134: ND-150,000Bq/kg, Cs-137: 30-190,000Bq/kg)
  - (Coasts and bathing areas)  
Cs-134: 13-530Bq/kg (dry) (Lower detection limit: 10Bq/kg (dry))  
Cs-137: 23-720Bq/kg (dry) (Lower detection limit: 10Bq/kg (dry))  
(\*Cs-134: 19-570Bq/kg, Cs-137: 23-770Bq/kg)
- Spatial dose
  - (Rivers) 0.06-11.63 $\mu$ Sv/h
  - (Lakes and headwaters) 0.14-20.48 $\mu$ Sv/h
  - (Coasts and bathing areas) 0.05-0.31 $\mu$ Sv/h

(Annex for details)  
(Map attached)

Future Plans

In coordination with relevant organizations, MOE intends to continue to measure radioactive materials in water, sediment, etc. in rivers, lakes, etc. in Fukushima Prefecture, its neighboring prefectures, etc.





# ○River (Fukushima Prefecture, Hamadori Area) : Surrounding Environment Monitoring Results

Sampling point				Sampling date	Weather	Temperature °C	Left bank				Right bank				Air dose (μSv/h)	Remarks
							Property	Soil Concentration of radioactive material (Bq/kg)			Air dose (μSv/h)	Soil				
No.	Water body	Point	Municipality					I-131	Radioactive iodine Cs-134	Radioactive cesium Cs-137		Property	Radioactive iodine I-131	Radioactive cesium Cs-134	Cs-137	

\* Air dose was measured with a survey meter, TCS-172 or TCS-161 of Hitachi-Aloka Medical, Ltd.

\* Collection points for rivers are listed from north to south, and for different points along the river, from upstream to downstream.































