

(News Release)
The Results of Radioactive Material Monitoring of the Surface Water Bodies
within Iwate Prefecture
(June Samples)

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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 Iwate Prefecture during the period of June 4-7, 2012 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

18 environmental reference points, etc. in the surface water bodies within Iwate Prefecture
(Rivers: 18 locations)

(2) Survey Method

- Measurement of concentrations of radioactive materials (radioactive cesium (Cs-134 and Cs-137), etc.) 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 (December 2011-January 2012))

(1) Water Quality (Lower detection limit: 1Bq/L)

Cs-134, Cs-137: Not detectable (ND) at any location
(* ND at any location)

<Reference>

Specification and Standards for Food, Food Additives, etc. in accordance with the Food Sanitation Act (Drinking Water) (Ministry of Health, Labour and Welfare Public Notice No.130, March 15, 2012)
Radioactive cesium (total for Cs-134+Cs-137): 10Bq/kg

Target value for radioactive materials in tap water (management target for water supply facilities) (March 5, 2012; 0305 Notice No.1 from the Director of the Water Supply Division, Health Service Bureau, Ministry of Health, Labour and Welfare)

Radioactive cesium (total for Cs-134+Cs-137): 10Bq/kg

(2) Sediment (Lower detection limit: 10Bq/kg (dried mud))

(Rivers)

Cs-134: ND-300Bq/kg (dried mud)

Cs-137: ND-18-470Bq/kg (dried mud)

(*Cs-134: 27-440Bq/kg (dried mud))

(*Cs-137: 32-550Bq/kg (dried mud))

(3) Surrounding Environment (Lower detection limit: 10Bq/kg (dry))

(Rivers)

Cs-134: 25-860Bq/kg (dry)

Cs-137: 45-1,300Bq/kg (dry)

(*Cs-134: 45-1,500Bq/kg (dry))

(*Cs-137: 71-1,900Bq/kg (dry))

Spatial dose: 0.07-0.26 μ 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: Water Quality Monitoring Results

(Annex)

Sampling point				Sampling date	Weather	Full depth m	General items					Concentration of radioactive material Bq/L			Remarks	
No.	Water body	Point	Municipality				Sampling depth m	Transparency cm	Electrical conductivity mS/m	SS mg/L	Turbidity	Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137			
1	Sakarigawa River Lower Reaches	Sanobashi Bridge	Ofunatoshi City	2012/6/6	Sunny	0.90	0.0	78	165	<1	1	<1	<1	<1		
2	Kesengawa River	Anehabashi Bridge	Rikuzentakadashi City	2012/6/6	Sunny	0.20	0.0	84	26	4	2	<1	<1	<1		
3	Okawa River	Prefectural border with Miyagi	Ichinosekishi City	2012/6/5	Sunny	0.30	0.0	>100	12	2	1	<1	<1	<1		
4	Tsuyagawa River	Chiyogaharabashi Bridge	Ichinosekishi City	2012/6/5	Sunny	0.70	0.0	>100	10	<1	1	<1	<1	<1		
5	R K i v e r a S m y g a w a	Kurosawagawa River	Kawaradabashi Bridge	Kanegasakimachi Town	2012/6/7	Cloudy	0.70	0.0	>100	15	1	1	<1	<1	<1	
6		Kitakamigawa River	Fujibashi Bridge	Oshushi City	2012/6/6	Cloudy	0.40	0.0	79	14	2	2	<1	<1	<1	
7		Shiratorigawa River	Shiratoribashi Bridge	Oshushi City	2012/6/7	Sunny	0.30	0.0	>100	12	4	3	<1	<1	<1	
8		Koromogawa River	Koromogawabashi Bridge	Hiraizumicho Town	2012/6/7	Sunny	0.70	0.0	>100	13	4	2	<1	<1	<1	
9		Otagawa River	Hitosujibashi Bridge	Hiraizumicho Town	2012/6/7	Sunny	0.20	0.0	>100	21	2	3	<1	<1	<1	
10		Iwaigawa River Middle Reaches	Kaminohashi Bridge	Ichinosekishi City	2012/6/4	Cloudy	0.20	0.0	>100	19	<1	1	<1	<1	<1	
11		Kitakamigawa River	Chitosebashi Bridge (Kozenji)	Ichinosekishi City	2012/6/4	Cloudy	0.20	0.0	98	22	4	2	<1	<1	<1	
12		Satetsugawa River	Unadabashi Bridge	Ichinosekishi City	2012/6/6	Sunny	0.30	0.0	>100	18	3	2	<1	<1	<1	
13			Kannonbashi Bridge	Ichinosekishi City	2012/6/6	Cloudy	0.50	0.0	>100	26	<1	1	<1	<1	<1	
14	Kanzakibashi Bridge		Ichinosekishi City	2012/6/5	Sunny	0.40	0.0	>100	16	1	1	<1	<1	<1		
15	Senmayagawa River Upper Reaches	Miyatabashi Bridge	Ichinosekishi City	2012/6/5	Sunny	0.30	0.0	>100	16	1	1	<1	<1	<1		
16	Kitakamigawa River	Kitakamigawabashi Bridge	Ichinosekishi City	2012/6/5	Sunny	0.40	0.0	>100	12	2	2	<1	<1	<1		
17	Kinomigawa River	Higuchibashi Bridge	Ichinosekishi City	2012/6/5	Sunny	0.60	0.0	97	21	2	2	<1	<1	<1		
18	Kinryugawa River	Tenjimbashi Bridge	Ichinosekishi City	2012/6/5	Sunny	0.30	0.0	12	11	23	12	<1	<1	<1		

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

○River: Sediment Monitoring Results

No.	Sampling point			Sampling date	Weather	Full depth m	General items			Concentration of radioactive material Bq/kg (dried mud)			Remarks	
	Water body	Point	Municipality				Mud sampling depth cm	Mud content %	Property	Radioactive iodine I-131	Radioactive cesium			
											Cs-134	Cs-137		
1	Sakarigawa River Lower Reaches	Sanobashi Bridge	Ofunatoshi City	2012/6/6	Sunny	0.90	5	83	Sand	<30	66	110		
2	Kesengawa River	Anehabashi Bridge	Rikuzentakadashi City	2012/6/6	Sunny	0.20	5	90	Sand	<30	<10	18		
3	Okawa River	Prefectural border with Miyagi	Ichinosekishi City	2012/6/5	Sunny	0.30	5	90	Sand	<30	120	180		
4	Tsuyagawa River	Chiyogaharabashi Bridge	Ichinosekishi City	2012/6/5	Sunny	0.70	5	90	Gravel/sand	<30	46	70		
5	R K i v e a r k a S m y i s g t a e w m a	Kurosawagawa River	Kawaradabashi Bridge	Kanegasakimachi Town	2012/6/7	Cloudy	0.70	5	90	Gravel/sand	<30	32	65	
6		Kitakamigawa River	Fujibashi Bridge	Oshushi City	2012/6/6	Cloudy	0.40	5	89	Gravel/sand	<30	27	50	
7		Shiratorigawa River	Shiratoribashi Bridge	Oshushi City	2012/6/7	Sunny	0.30	5	93	Gravel/sand	<30	55	79	
8		Koromogawa River	Koromogawabashi Bridge	Hiraizumicho Town	2012/6/7	Sunny	0.70	5	90	Gravel/sand	<30	150	210	
9		Otagawa River	Hitosujibashi Bridge	Hiraizumicho Town	2012/6/7	Sunny	0.20	5	73	Silt	<30	300	470	
10		Iwaigawa River Middle Reaches	Kaminohashi Bridge	Ichinosekishi City	2012/6/4	Cloudy	0.20	5	90	Gravel/sand	<30	75	120	
11		Kitakamigawa River	Chitosebashi Bridge (Kozenji)	Ichinosekishi City	2012/6/4	Cloudy	0.20	5	91	Sand	<30	63	95	
12		Satetsugawa River	Unadabashi Bridge	Ichinosekishi City	2012/6/6	Sunny	0.30	5	92	Sand	<30	55	96	
13			Kannonbashi Bridge	Ichinosekishi City	2012/6/6	Cloudy	0.50	5	94	Gravel/sand	<30	100	130	
14			Kanzakibashi Bridge	Ichinosekishi City	2012/6/5	Sunny	0.40	5	86	Sand	<30	49	88	
15		Senmayagawa River Upper Reaches	Miyatabashi Bridge	Ichinosekishi City	2012/6/5	Sunny	0.30	5	88	Sand	<30	150	230	
16		Kitakamigawa River	Kitakamigawabashi Bridge	Ichinosekishi City	2012/6/5	Sunny	0.40	5	89	Sand	<30	17	34	
17		Kinomigawa River	Higuchibashi Bridge	Ichinosekishi City	2012/6/5	Sunny	0.60	5	85	Sand/silt	<30	100	170	
18		Kinryugawa River	Tenjinbashi Bridge	Ichinosekishi City	2012/6/5	Sunny	0.30	5	89	Gravel/sand	<30	84	130	

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

○River: Surrounding Environment Monitoring Results

Sampling point				Sampling date	Weather	Left bank				Right bank				Remarks			
No.	Water body	Point	Municipality			Property	Concentration of radioactive material Bq/kg (dry)			Air dose μSv/h	Property	Concentration of radioactive material Bq/kg (dry)			Air dose μSv/h		
							Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137				Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137				
1	Sakarigawa River Lower Reaches	Sanobushi Bridge	Ofunatoshi City	2012/6/6	Sunny	Loamy	<30	97	150	0.09	Loamy	<30	250	360	0.09		
2	Kesengawa River	Anchabashi Bridge	Rikuzentakadashi City	2012/6/6	Sunny	Sandy	<30	27	45	0.07	Sandy	<30	54	83	0.08		
3	<i>Okawa River</i>	Prefectural border with Miyagi	Ichinosekishi City	2012/6/5	Sunny	-	-	-	-	-	Sandy	<30	200	310	0.15	(Left bank) Soil not exposed	
4	Tsuyagawa River	Chiyogaharabashi Bridge	Ichinosekishi City	2012/6/5	Sunny	Loamy	<30	190	330	0.13	Loamy	<30	270	420	0.13		
5	R K i v e r K a s a g a w a R i v e r	Kurosawagawa River	Kawarabashi Bridge	Kanegasakimachi Town	2012/6/7	Cloudy	Loamy	<30	86	130	0.10	Loamy	<30	79	130	0.09	
6		Kitakamigawa River	Fujibashi Bridge	Oshushi City	2012/6/6	Cloudy	Loamy	<30	140	220	0.12	Loamy	<30	82	140	0.17	
7		Shiratorigawa River	Shiratoribashi Bridge	Oshushi City	2012/6/7	Sunny	Loamy	<30	360	540	0.25	Loamy	<30	360	570	0.24	
8		Koromogawa River	Koromogawabashi Bridge	Hiraizumicho Town	2012/6/7	Sunny	Loamy	<30	490	740	0.17	Clay-loamy	<30	200	290	0.16	
9		Otagawa River	Hitosujibashi Bridge	Hiraizumicho Town	2012/6/7	Sunny	Clay-loamy	<30	290	460	0.20	Loamy	<30	630	920	0.18	
10		Iwaigawa River Middle Reaches	Kaminohashi Bridge	Ichinosekishi City	2012/6/4	Cloudy	Loamy	<30	510	760	0.20	Loamy	<30	210	330	0.17	
11		Kitakamigawa River	Chitosebashi Bridge (Kozenji)	Ichinosekishi City	2012/6/4	Cloudy	Loamy	<30	240	400	0.10	Sandy	<30	460	720	0.13	
12		Unadabashi Bridge	Ichinosekishi City	2012/6/6	Sunny	Sandy	<30	84	110	0.13	Loamy	<30	110	170	0.15		
13		Satetsugawa River	Kannonbashi Bridge	Ichinosekishi City	2012/6/6	Cloudy	Sandy	<30	160	260	0.15	Sandy	<30	97	140	0.17	
14			Kanzakibashi Bridge	Ichinosekishi City	2012/6/5	Sunny	Clay-loamy	<30	310	480	0.23	Loamy	<30	400	600	0.21	
15		Senmayagawa River Upper Reaches	Miyatabashi Bridge	Ichinosekishi City	2012/6/5	Sunny	Loamy	<30	240	420	0.17	Loamy	<30	290	430	0.19	
16		Kitakamigawa River	Kitakamigawabashi Bridge	Ichinosekishi City	2012/6/5	Sunny	Loamy	<30	860	1,300	0.15	Sandy	<30	140	230	0.22	
17		Kinomigawa River	Higuchibashi Bridge	Ichinosekishi City	2012/6/5	Sunny	Clay-loamy	<30	25	45	0.09	Loamy	<30	110	170	0.08	
18		Kinryugawa River	Tenjimbashi Bridge	Ichinosekishi City	2012/6/5	Sunny	Loamy	<30	320	480	0.25	Loamy	<30	400	620	0.26	

*Air dose was measured with a survey meter, TCS-171 or TCS-172 of Hitachi-Aloka Medical, Ltd.

• Sampling points for rivers are listed from north to south, and for different points along the river, from upstream to downstream.

