

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

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Water Environment Division,
Environment Management Bureau,
Ministry of the Environment
Direct line: 03-5521-8316
Switchboard: 03-3581-3351
Director: Tadashi Kitamura (ext. 6610)
Deputy Director: Tetsuo Furuta (ext. 6614)
Coordinator: Katsuhiko Sato (ext. 6628)

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 September 3-5, 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

14 environmental reference points, etc. in the surface water bodies within Iwate Prefecture

(Rivers: 14 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 (June))

(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))

Overall, the levels were around 200Bq/kg or below at almost all locations, and have generally remained constant or had a declining tendency.

Cs-134 + Cs-137: 40-400Bq/kg (dried mud) (*51-380Bq/kg (dried mud))

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

Cs-134 + Cs-137: 220-2,600Bq/kg (dry) (*70-2,160Bq/kg (dry))

Spatial dose: 0.07-0.27 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. (once in 1-3 months).

ORiver: Water Quality Monitoring Results

No.	Sampling point			Sampling date	Weather	Full depth m	General items					Concentration of radioactive material Bq/L			Remarks	
	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	Okawa River	Prefectural border with Miyagi	Ichinosekishi City	2012/9/5	Sunny	0.5	0.0	>100	13	1	1	<1	<1	<1		
2	R K i t a k a m i g a w a R i v e r	Kurosawagawa River	Kawaradabashi Bridge	2012/9/3	Sunny	0.5	0.0	>100	19	3	1	<1	<1	<1		
3		Kitakamigawa River	Fujibashi Bridge	Oshushi City	2012/9/3	Sunny	0.3	0.0	>100	21	2	1	<1	<1	<1	
4		Shiratorigawa River	Shiratoribashi Bridge	Oshushi City	2012/9/4	Sunny	0.2	0.0	>100	16	<1	1	<1	<1	<1	
5		Koromogawa River	Koromogawabashi Bridge	Hiraizumicho Town	2012/9/4	Sunny	0.3	0.0	>100	13	<1	1	<1	<1	<1	
6		Iwaigawa River Middle Reaches	Kaminohashi Bridge	Ichinosekishi City	2012/9/4	Sunny	0.3	0.0	>100	22	2	1	<1	<1	<1	
7		Kitakamigawa River	Chitosebashi Bridge (Kozenji)	Ichinosekishi City	2012/9/4	Sunny	0.5	0.0	>100	19	<1	1	<1	<1	<1	
8		Unadabashi Bridge	Ichinosekishi City	2012/9/4	Cloudy	0.4	0.0	>100	17	<1	1	<1	<1	<1	<1	
9		Satetsugawa River	Kannonbashi Bridge	Ichinosekishi City	2012/9/4	Sunny	0.7	0.0	>100	28	2	1	<1	<1	<1	
10		Kanzakibashi Bridge	Ichinosekishi City	2012/9/5	Sunny	0.4	0.0	75	17	6	1	<1	<1	<1	<1	
11		Senmayagawa River Upper Reaches	Miyatabashi Bridge	Ichinosekishi City	2012/9/5	Sunny	0.3	0.0	>100	15	2	1	<1	<1	<1	
12		Kitakamigawa River	Kitakamigawabashi Bridge	Ichinosekishi City	2012/9/5	Sunny	0.4	0.0	62	16	4	1	<1	<1	<1	
13		Kinomigawa River	Higuchibashi Bridge	Ichinosekishi City	2012/9/5	Sunny	0.5	0.0	64	19	6	2	<1	<1	<1	
14		Kinryugawa River	Tenjinbashi Bridge	Ichinosekishi City	2012/9/5	Sunny	0.2	0.0	39	14	11	4	<1	<1	<1	

ORiver: 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	Cs-134	Radioactive cesium Cs-137 Total			
1	Okawa River	Prefectural border with Miyagi	Ichinosekishi City	2012/9/5	Sunny	0.5	2	93	Sand	<30	59	93	152		
2	R K i t a k a m i g a w a R i v e r	Kurosawagawa River	Kawaradabashi Bridge	2012/9/3	Sunny	0.5	3	93	Sand	<30	29	47	76		
3		Kitakamigawa River	Fujibashi Bridge	Oshushi City	2012/9/3	Sunny	0.3	2	92	Gravel/sand	<30	15	25	40	
4		Shiratorigawa River	Shiratoribashi Bridge	Oshushi City	2012/9/4	Sunny	0.2	3	92	Sand	<30	46	65	111	
5		Koromogawa River	Koromogawabashi Bridge	Hiraizumicho Town	2012/9/4	Sunny	0.3	4	91	Sand	<30	63	93	156	
6		Iwaigawa River Middle Reaches	Kaminohashi Bridge	Ichinosekishi City	2012/9/4	Sunny	0.3	3	88	Sand	<30	54	87	141	
7		Kitakamigawa River	Chitosebashi Bridge (Kozenji)	Ichinosekishi City	2012/9/4	Sunny	0.5	3	88	Sand	<30	19	35	54	
8		Unadabashi Bridge	Ichinosekishi City	2012/9/4	Cloudy	0.4	4	94	Sand	<30	55	95	150		
9		Satetsugawa River	Kannonbashi Bridge	Ichinosekishi City	2012/9/4	Sunny	0.7	3	89	Sand	<30	120	190	310	
10		Kanzakibashi Bridge	Ichinosekishi City	2012/9/5	Sunny	0.4	1	82	Sand	<30	52	95	147		
11		Senmayagawa River Upper Reaches	Miyatabashi Bridge	Ichinosekishi City	2012/9/5	Sunny	0.3	3	88	Sand	<30	130	230	360	
12		Kitakamigawa River	Kitakamigawabashi Bridge	Ichinosekishi City	2012/9/5	Sunny	0.4	3	88	Sand	<30	24	41	65	
13		Kinomigawa River	Higuchibashi Bridge	Ichinosekishi City	2012/9/5	Sunny	0.5	2	93	Sand	<30	52	86	138	
14		Kinryugawa River	Tenjinbashi Bridge	Ichinosekishi City	2012/9/5	Sunny	0.2	2	93	Sand	<30	150	250	400	

ORiver: Surrounding Environment Monitoring Results

No.	Sampling point			Sampling date	Weather	Property	Left bank				Air dose μ Sv/h	Property	Right bank				Remarks		
	Water body	Point	Municipality				Concentration of radioactive material Bq/kg (dry)			Air dose μ Sv/h			Concentration of radioactive material Bq/kg (dry)						
							Radioactive iodine I-131	Cs-134	Radioactive cesium Cs-137 Total				Radioactive iodine I-131	Cs-134	Radioactive cesium Cs-137 Total				
1	Okawa River	Prefectural border with Miyagi	Ichinosekishi City	2012/9/5	Sunny	-	-	-	-	-	Sandy	<30	160	270	430	0.15	Soil not exposed		
2	R K i t a k a m i g a w a R i v e r	Kurosawagawa River	Kawaradabashi Bridge	2012/9/3	Sunny	Loamy	<30	220	360	580	0.09	Loamy	<30	100	170	270	0.07		
3		Kitakamigawa River	Fujibashi Bridge	Oshushi City	2012/9/3	Sunny	Loamy	<30	390	630	1,020	0.11	Loamy	<30	270	440	710	0.16	
4		Shiratorigawa River	Shiratoribashi Bridge	Oshushi City	2012/9/4	Sunny	Loamy	<30	430	710	1,140	0.19	Loamy	<30	440	760	1,200	0.21	
5		Koromogawa River	Koromogawabashi Bridge	Hiraizumicho Town	2012/9/4	Sunny	Loamy	<30	800	1,300	2,100	0.17	Loamy	<30	170	280	450	0.14	
6		Iwaigawa River Middle Reaches	Kaminohashi Bridge	Ichinosekishi City	2012/9/4	Sunny	Loamy	<30	470	780	1,250	0.18	Loamy	<30	480	760	1,240	0.14	
7		Kitakamigawa River	Chitosebashi Bridge (Kozenji)	Ichinosekishi City	2012/9/4	Sunny	Loamy	<30	310	500	810	0.10	Loamy	<30	500	790	1,290	0.13	
8		Unadabashi Bridge	Ichinosekishi City	2012/9/4	Cloudy	Loamy	<30	130	210	340	0.11	Loamy	<30	180	290	470	0.13		
9		Satetsugawa River	Kannonbashi Bridge	Ichinosekishi City	2012/9/4	Sunny	Skeletal/loamy	<30	1,000	1,600	2,600	0.14	Skeletal/loamy	<30	280	480	760	0.10	
10		Kanzakibashi Bridge	Ichinosekishi City	2012/9/5	Sunny	Sandy	<30	220	370	590	0.23	Loamy	<30	600	1,000	1,600	0.21		
11		Senmayagawa River Upper Reaches	Miyatabashi Bridge	Ichinosekishi City	2012/9/5	Sunny	Loamy	<30	710	1,100	1,810	0.15	Loamy	<30	670	1,100	1,770	0.18	
12		Kitakamigawa River	Kitakamigawabashi Bridge	Ichinosekishi City	2012/9/5	Sunny	Loamy	<30	450	730	1,180	0.15	Loamy	<30	300	470	770	0.20	
13		Kinomigawa River	Higuchibashi Bridge	Ichinosekishi City	2012/9/5	Sunny	Skeletal/loamy	<30	300	510	810	0.09	Loamy	<30	80	140	220	0.07	
14		Kinryugawa River	Tenjinbashi Bridge	Ichinosekishi City	2012/9/5	Sunny	Loamy	<30	680	1,100	1,780	0.23	Loamy	<30	680	1,100	1,780	0.27	

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

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

