

(News Release)
The Results of Radioactive Material Monitoring of the Surface Water Bodies
within Miyagi Prefecture
(July-October 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 Miyagi Prefecture during the period of July 3-October 12, 2012 have been measured as part of 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

60 environmental reference points, etc. in the surface water bodies within Miyagi Prefecture
(Rivers: 43 locations, Lakes: 17 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 (April-June))

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

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

(* Rivers: ND-7Bq/L, Lakes and headwaters: 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 of both the rivers and lakes/headwaters measured were around 2,000Bq/kg or below at most of the locations, and have generally remained constant or had a declining tendency.

(Rivers)

Cs-134 + Cs-137: ND-3,700Bq/kg (dried mud) (*ND-3,400Bq/kg (dried mud))

(Lakes and headwaters)

Cs-134 + Cs-137: ND-1,940Bq/kg (dried mud) (*12-3,000Bq/kg (dried mud))

<Reference> Number of locations by radioactive cesium concentration (500Bq/kg)
 Numbers in () denote results measured on the previous occasion.

	500 or below	501 -1,000	1,001 -1,500	1,501 -2,000	2,001 -2,500	2,501 -3,000	3,001 or more
Rivers	33 (31)	8 (5)	0 (4)	0 (1)	1 (1)	0 (0)	0 (1)
Lakes and headwaters	6 (6)	4 (2)	3 (4)	4 (1)	0 (1)	0 (1)	0 (0)

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

(Rivers)

Cs-134 + Cs-137: ND-4,100Bq/kg (dry) (*44-5,700Bq/kg (dry))

Spatial dose: 0.03-0.42μSv/h

(Lakes and headwaters)

Cs-134 + Cs-137: 43-5,000Bq/kg (dry) (*147-4,400Bq/kg (dry))

Spatial dose: 0.06-0.26μSv/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

(Annex)

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	I-131	Radioactive iodine Cs-134	Radioactive cesium Cs-137	
1	Shishiorigawa River	Kinzanbashi Bridge	Kesennumashi City	2012/9/6	Cloudy	0.2	0.0	>100	18	9	1	<1	<1	<1	
2				Namitabashi Bridge	2012/9/6	Sunny	1.1	0.0	>100	2,350	1	2	<1	<1	<1
3				Fateyamaohushi Bridge	2012/9/6	Cloudy	0.3	0.0	45	20	5	2	<1	<1	<1
4				Kamiyamabashi Bridge	2012/9/6	Cloudy	0.4	0.0	76	48	1	1	<1	<1	<1
5				Okawa River Estuary	2012/9/5	Sunny	1.2	0.0	96	4,110	3	1	<1	<1	<1
6	Omosegawa River	Okakibashi Bridge		2012/9/6	Cloudy, then rain	0.6	0.0	85	108	2	2	<1	<1	<1	
7	K i t a m a S y g a t e m a R i v e r	Arimagawa River	Unadabashi Bridge	2012/9/19	Cloudy	0.2	0.0	>100	2	3	1	<1	<1	<1	
8		Kiryugawa River	Obatabashi Bridge	2012/9/20	Cloudy	0.2	0.0	70	2	3	1	<1	<1	<1	
9		Kitakamigawa River	Tomohashi Bridge (Tome)	2012/9/20	Cloudy	0.3	0.0	57	2	9	2	<1	<1	<1	
10		Sanhasamagawa River	Domanbashi Bridge (Kurikoma Dam)	2012/9/19	Cloudy	0.5	0.0	>100	2	<1	1	<1	<1	<1	
11			Nihagamagawa River	Kajiyabashi Bridge	2012/9/19	Cloudy	0.1	0.0	25	2	7	5	<1	<1	<1
12			Hasamagawa River	Hamayama Dam, inflow area	2012/9/19	Cloudy	1.0	0.0	>100	1	2	1	<1	<1	<1
13		Hasamagawa River	Wakayagagi	2012/9/20	Cloudy	0.3	0.0	73	2	10	2	<1	<1	<1	
14			Yamayoshidabashi Bridge	2012/9/20	Cloudy	0.5	0.0	40	2	8	3	<1	<1	<1	
15		Eaigawa River	Todorokibashi Bridge (Todoroki)	2012/9/19	Cloudy	0.4	0.0	>100	1	2	0	<1	<1	<1	
16			Shimzokomon Weir	2012/9/18	Sunny	0.3	0.0	86	2	2	1	<1	<1	<1	
17	In Funakawa District, Osakishi City		Shinborisaton, entrance	2012/9/18	Sunny	2.8	0.0	51	2	3	1	<1	<1	<1	
18	Dekigawa River		Kogotabashi Bridge	2012/9/20	Cloudy	0.6	0.0	37	2	21	4	<1	<1	<1	
19	Eaigawa River	Okawabashi Bridge (Tandai)	Wakuyacho Town/Ishinomakishi City	2012/9/20	Cloudy	0.6	0.0	45	2	8	2	<1	<1	<1	
20	Kyuktakamigawa River	Kadonowaki	Ishinomakishi City	2012/9/20	Cloudy	1.3	0.0	58	68	2	1	<1	<1	<1	
21	Narusegawa River	Onobashi Bridge (Ono)	Higashimatsushima City	2012/9/20	Cloudy	0.3	0.0	42	2	5	2	<1	<1	<1	
22	Sunaoshigawa River	Tagajozeki Weir	Tagajoshi City	2012/9/21	Rain	0.4	0.0	18	6	25	7	<1	<1	<1	
23		Nebutsubashi Bridge	2012/9/21	Rain	1.5	0.0	95	0	2	2	<1	<1	<1		
24	Teizan-unga Canal (Kusanaoshigawa River)	Teizanbashi Bridge	Shiogama City/Shichiharamachi Town/Tagajoshi City	2012/9/21	Light rain	0.2	0.0	95	352	2	2	<1	<1	<1	
25	Nanakitagawa River System	Nanakitagawa River	Nanakitabashi Bridge	2012/9/26	Sunny	0.3	0.0	77	521	5	2	<1	<1	<1	
26		Fukudabashi Bridge	2012/9/27	Cloudy	0.6	0.0	45	572	8	3	<1	<1	<1		
27		Umedagawa River	Fukudabashi Bridge	2012/9/27	Sunny	0.5	0.0	47	515	6	3	<1	<1	<1	
28		Nanakitagawa River	Takasobashi Bridge	2012/9/26	Sunny	0.3	0.0	51	817	5	3	<1	<1	<1	
29		Natoriogawa River	Yuriagebashi Bridge	2012/9/25	Sunny	2.0	0.0	74	1	6	3	<1	<1	<1	
30	Natoriogawa River System	Yakushibashi Bridge	2012/9/25	Sunny	0.4	0.0	>100	19	<1	1	<1	<1	<1		
31		Massadagawa River	Koyamabashi Bridge	2012/9/25	Rain	1.2	0.0	52	16	15	4	<1	<1	<1	
32		Bishamonbashi Bridge	2012/9/25	Rain	1.0	0.0	25	75	18	3	<1	<1	<1		
33		Abukumagawa River	Hadenwabashi Bridge	2012/7/17	Cloudy	0.3	0.0	95	20	4	2	<1	<1	<1	
34	Marumoriashi Bridge		Marumoriashi Town	2012/8/20	Sunny	1.2	0.0	52	18	3	1	<1	<1	<1	
				2012/9/6	Cloudy	0.2	0.0	19	15	14	5	<1	<1	<1	
				2012/7/18	Rain	0.7	0.0	>100	17	2	2	<1	<1	<1	
				2012/8/20	Sunny	0.2	0.0	75	17	3	1	<1	<1	<1	
35	Ejiribashi Bridge	2012/9/6	Cloudy	0.2	0.0	26	17	13	5	<1	<1	<1			
S y s t e m R i v e r	Shiroshigawa River	Shiroshigawa River	Before the confluence with Kawaragawa River (Sunoobashi Bridge)	2012/9/10	Sunny	0.8	0.0	46	8	3	1	<1	<1	<1	
		Saikawa River	Eisubashi Bridge	2012/9/11	Sunny	0.2	0.0	89	13	1	1	<1	<1	<1	
		Miyakawa River	Miyaobashi Bridge	2012/9/11	Sunny	0.2	0.0	>100	22	2	1	<1	<1	<1	
		Arakawa River	Niragambashi Bridge	2012/9/10	Sunny	0.3	0.0	46	16	12	4	<1	<1	<1	
		Shiroshigawa River	Shirahatabashi Bridge	2012/9/10	Sunny	0.2	0.0	61	16	4	1	<1	<1	<1	
41	Abukumagawa River	Tsukinokiohashi Bridge	Kakudashi City/Shibatamachi Town	2012/7/18	Cloudy	1.5	0.0	33	17	2	3	<1	<1	<1	
				2012/9/6	Rain	0.4	0.0	23	16	7	4	<1	<1	<1	
				2012/7/18	Cloudy	0.8	0.0	54	16	2	2	<1	<1	<1	
				2012/8/20	Sunny	0.5	0.0	52	18	4	2	<1	<1	<1	
				2012/9/6	Sunny	0.8	0.0	45	17	5	2	<1	<1	<1	
42	Abukumagawa River	Abukumashashi Bridge (Iwanuma)	Iwanumashi City/Wataricho Town	2012/7/18	Cloudy	0.6	0.0	84	213	2	2	<1	<1	<1	
				2012/9/6	Sunny	0.7	0.0	73	335	4	3	<1	<1	<1	
43	Abukumagawa River Estuary (Watariohashi Bridge)	Iwanumashi City/Wataricho Town	2012/9/6	Sunny	0.7	0.0	73	335	4	3	<1	<1	<1		

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

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		Radioactive cesium				
										I-131	Cs-134	Cs-137	Total			
1	Shiohorigawa River	Kinzanbashi Bridge	Kesennumashi City	2012/9/6	Cloudy	0.2	2	86	Sand	<30	44	80	124			
2		Namitabashi Bridge		2012/9/6	Sunny	1.1	1	73	Mud	<30	65	100	165			
3		Tateyamaohashi Bridge		2012/9/6	Cloudy	0.3	3	91	Sand	<30	35	56	91			
4	Okawa River	Kamiyamabashi Bridge	Kesennumashi City	2012/9/6	Cloudy	0.4	2	77	Sand	<30	82	140	222			
5		Okawa River Estuary		2012/9/5	Sunny	1.2	5	93	Sand	<30	<10	<10	-			
6	Omogogawa River	Ozakibashi Bridge		2012/9/6	Cloudy, then rain	0.6	4	69	Sludge	<30	140	260	400			
7	Kiritagawa River Smygataewma River Rivier	Arimagawa River	Urandabashi Bridge	2012/9/19	Cloudy	0.2	1	88	Sand/gravel	<30	220	350	570			
8		Kimryugawa River	Obatabashi Bridge	2012/9/20	Cloudy	0.2	1	86	Sand	<30	150	230	380			
9		Kitakamigawa River	Tomeohashi Bridge (Tome)		2012/9/20	Cloudy	0.3	3	83	Sand/silt	<30	45	73	118		
10		Hasamagawa River	Sarhasamagawa River	Domabashi Bridge (Karakoma Dam)	2012/9/19	Cloudy	0.5	4	60	Silt	<30	100	160	260		
11			Nhasamagawa River	Kajiyabashi Bridge	2012/9/19	Cloudy	0.1	1	84	Sand	<30	180	270	450		
12			Hasamagawa River	Hasayama Dam, inflow area		2012/9/19	Cloudy	1.0	2	84	Sand/gravel/silt	<30	20	36	56	
13			Wakayanagi		2012/9/20	Cloudy	0.3	3	78	Sand/silt	<30	130	210	340		
14		Tomeshi City	Yamayashidabashi Bridge		2012/9/20	Cloudy	0.5	3	93	Sand	<30	28	41	69		
15			Todorokibashi Bridge (Todoroki)		2012/9/19	Cloudy	0.4	2	43	Mud/silt	<30	370	600	970		
16		Osakishi City	Shimizukomon Weir		2012/9/18	Sunny	0.3	4	86	Sand	<30	40	64	104		
17			In Furukawa District, Osakishi City	Shinborisaihon, entrance	2012/9/18	Sunny	2.8	3	71	Sludge	<30	310	490	800		
18			Dokigawa River	Kogotabashi Bridge	Misatomachi Town	2012/9/20	Cloudy	0.6	4	51	Mud	<30	350	580	930	
19		Okawabashi Bridge (Tandai)		Wakayacho Town/Ihinomakishi City	2012/9/20	Cloudy	0.6	4	84	Sand	<30	24	42	66		
20		Kyukitakamigawa River	Kadonowaki	Ihinomakishi City	2012/9/20	Cloudy	1.3	3	91	Sand	<30	19	30	49		
21		Narusogawa River	Onobushi Bridge (Ono)	Higashimatsushimashi City	2012/9/20	Cloudy	0.3	4	90	Sand	<30	15	26	41		
22		Sunaosigawa River	Tagajozeki Weir	Tagajoshi City	2012/9/21	Rain	0.4	4	66	Mud	<30	210	350	560		
23			Nenbutsubashi Bridge		2012/9/21	Rain	1.5	1	61	Mud	<30	270	440	710		
24		Tsuzumi-umgi Canal (Kiyusomoshigawa River)	Teizanbashi Bridge	Shiogama City/Shiogamamachi Town/Tagajoshi City	2012/9/21	Light rain	0.2	6	48	Sludge	<30	880	1,400	2,280		
25		Nanakitagawa River System	Nanakitagawa River	Nanakitabashi Bridge	2012/9/26	Sunny	0.3	3	91	Sand	<30	130	220	350		
26	Fukudaobashi Bridge			2012/9/27	Cloudy	0.6	3	92	Sand	<30	24	36	60			
27	Umedagawa River		Fukudabashi Bridge		2012/9/27	Sunny	0.5	10	88	Sand	<30	18	35	53		
28	Nanakitagawa River		Takagobashi Bridge		2012/9/26	Sunny	0.3	2	78	Silt	<30	<10	<10	-		
29	Natorigawa River System	Yuriagobashi Bridge	Sendaishi City/Natorishi City	2012/9/25	Sunny	2.0	3	80	Sand	<30	<10	14	14			
30		Yakushibashi Bridge		2012/9/25	Sunny	0.4	2	71	Sand	<30	90	130	220			
31		Koyamabashi Bridge	Natorishi City	2012/9/25	Rain	1.2	3	88	Sand	<30	72	130	202			
32		Bishamobashi Bridge		2012/9/25	Rain	1.0	5	55	Silt	<30	1,400	2,300	3,700			
33	Abukimagawa River	Hadeniwabashi Bridge	Marumoriomachi Town	2012/7/17	Cloudy	0.3	3	89	Sand	<30	150	230	380			
						2012/8/20	Sunny	1.2	5	86	Sand	<30	160	270	430	
						2012/9/6	Cloudy	0.2	3	90	Sand	<30	210	320	530	
34		Marumoriomachi Bridge	Marumoriomachi Town	2012/7/18	Rain	0.7	5	84	Sand	<30	230	380	610			
						2012/8/20	Sunny	0.2	2	91	Sand/gravel	<30	110	170	280	
						2012/9/6	Cloudy	0.2	2	94	Sand	<30	65	97	162	
35	Ejiribashi Bridge		Kakudashi City	2012/7/18	Cloudy	0.3	5	94	Sand	<30	76	140	216			
				2012/9/6	Rain	0.2	3	94	Sand	<30	110	170	280			
36	Shiroshigawa River	Shiroshigawa River	Shiroshishi City	2012/9/10	Sunny	0.8	4	90	Sand	<30	46	77	123			
37		Sakawa River	Etsubobashi Bridge	Shiroshishi City	2012/9/11	Sunny	0.2	3	91	Sand/gravel	<30	130	220	350		
38		Matsukawa River	Myohashi Bridge	Zaomachi Town	2012/9/11	Sunny	0.2	1	88	Sand	<30	18	29	47		
39		Arakawa River	Niragimbashi Bridge	Muratamachi Town/Ogawaramachi Town	2012/9/10	Sunny	0.3	2	93	Sand	<30	17	21	38		
40		Shirahatubashi Bridge		Shibatamachi Town	2012/9/10	Sunny	0.2	5	90	Sand	<30	13	19	32		
41	Abukimagawa River	Tsukinokohashi Bridge	Kakudashi City/Shibatamachi Town	2012/7/18	Cloudy	1.5	5	89	Sand	<30	34	54	88			
						2012/9/6	Rain	0.4	1	82	Sand	<30	130	210	340	
						2012/7/18	Cloudy	0.8	5	87	Sand	<30	50	86	136	
42		Abukumaohashi Bridge (Iwanuma)	Iwanumashi City/Wataricho Town	2012/8/20	Sunny	0.5	5	84	Sand	<30	76	120	196			
						2012/9/6	Sunny	0.8	2	90	Sand	<30	53	90	143	
						2012/7/18	Cloudy	0.6	5	92	Gravel/sand	<30	37	67	104	
43	Abukumagawa River Estuary (Wataricho Bridge)		Iwanumashi City/Wataricho Town	2012/9/6	Sunny	0.7	1	91	Sand	<30	38	64	102			

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

