

## Results of Radioactive Material Monitoring of Groundwater (Report No. 9)

Tuesday, November 20, 2012

Office of Groundwater and Ground Environment,

Soil Environment Division,

Environmental Management Bureau,

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In accordance with the Comprehensive Monitoring Plan determined by the Monitoring Coordination Meeting of the national government, the Ministry of the Environment (MOE) is continuing to monitor radioactive materials in groundwater.

The analysis results of the measurement of activity concentrations in groundwater samples collected in Fukushima Prefecture (from September 24 to October 2) are released here as Report No. 9.

## Outline of Results

Measurement of I-131, Cs-134, and Cs-137 was conducted at 132 locations within Fukushima Prefecture. Additionally, measurement of Sr-89 and Sr-90 was also conducted at 11 locations. (Detection limit for all these measurements: 1 Bq/L)

I-131, Cs-134, Cs-137, Sr-89, and Sr-90 were not detectable at any of the locations surveyed. (See the Annex for details.)

- \* 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): 10 Bq/kg
- \* Reference Values 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): 10 Bq/kg

## o Future Plans

In and around Fukushima Prefecture, MOE intends to continue to monitor activity concentrations in groundwater, in coordination with the prefectural government, municipalities, and other relevant organizations.

(Attachment 1/4)

	its of Groundwater Monitoring	Sampling Date						
No.	District		I-131	C	Cs	Sr		Remarks
				Cs-134	Cs-137	Sr-89	Sr-90	
1	Fukushima City Koshihama Town	2012/10/2	ND	ND	ND	_	_	
2	Fukushima City Watari	2012/10/2	ND	ND	ND	_	_	
3	Fukushima City Watari	2012/10/2	ND	ND	ND	_	_	
4	Fukushima City Oguraji	2012/10/2	ND	ND	ND	_	_	
5	Fukushima City Gonome	2012/10/2	ND	ND	ND	_	_	
6	Fukushima City Tazawa	2012/10/1	ND	ND	ND	_	_	
7	Fukushima City Oyama	2012/9/28	ND	ND	ND	_	_	
8	Fukushima City Minamisawamata	2012/9/28	ND	ND	ND	_	_	
9	Fukushima City Onami	2012/10/1	ND	ND	ND	_	_	
10	Fukushima City Onami	2012/10/1	ND	ND	ND	_	_	
11	Fukushima City Okabe	2012/10/2	ND	ND	ND	_	_	
12	Fukushima City Motouchi	2012/10/2	ND	ND	ND	_	_	
13	Fukushima City Senoue Town	2012/9/28	ND	ND	ND	_	_	
14	Fukushima City Minamiyanome	2012/9/28	ND	ND	ND	_	_	
15	Fukushima City Yagita	2012/9/28	ND	ND	ND	_	_	
16	Fukushima City Kaminagura	2012/10/2	ND	ND	ND	_	_	
17	Fukushima City Sasaya	2012/9/28	ND	ND	ND	_	_	
18	Fukushima City Tatsugoyama	2012/10/1	ND	ND	ND	_	_	
19	Fukushima City Iizaka Town	2012/9/28	ND	ND	ND	_	_	
20	Fukushima City Matsukawa Town	2012/10/1	ND	ND	ND	_	_	
21	Fukushima City Matsukawa Towni Sekiya	2012/10/1	ND	ND	ND	_	_	
22	Fukushima City Shimotoriwata	2012/10/2	ND	ND	ND	_	_	
23	Fukushima City Sasakino	2012/9/28	ND	ND	ND	_	_	
24	Fukushima City Kaminodera	2012/9/28	ND	ND	ND	_	_	
25	Fukushima City Iinomachi Town Meiji	2012/10/1	ND	ND	ND	_	_	
26	Fukushima City Iino Town Aoki	2012/10/1	ND	ND	ND	_	_	
27	Date City Yanagawa Town Yamafunyu	2012/9/25	ND	ND	ND	_	_	
28	Date City Hobara Town Tomizawa	2012/9/26	ND	ND	ND	_	_	
29	Date City Hobara Town Tomizawa	2012/9/26	ND	ND	ND	_	_	
30	Date City Hobara Town Tomizawa	2012/9/26	ND	ND	ND	_	_	
31	Date City Hobara Town Tomizawa	2012/9/26	ND	ND	ND	_	_	
32	Date City Hobara Town Tomizawa	2012/9/26	ND	ND	ND	_	_	
33	Date City Hobara Town Tomizawa	2012/9/26	ND	ND	ND	_	_	
34	Date City Hobara Town Tomizawa	2012/9/26	ND	ND	ND	_	_	
35	Date City Hobara Town Tomizawa	2012/9/26	ND	ND	ND	_	_	

Note) Measurement results are indicated as ND when detected values were below the detection limit of activity concentrations (1 Bq/L). (Map attached)

(Attachment 2/4)

		Sampling Date						
No.	District		I-131	C	Cs	Sr		Remarks
				Cs-134	Cs-137	Sr-89	Sr-90	1
36	Date City Hobara Town Takanarita	2012/9/26	ND	ND	ND	_	_	
37	Date City Ryozen Town Kamioguni	2012/9/26	ND	ND	ND	_	_	
38	Date City Ryozen Town Kamioguni	2012/9/26	ND	ND	ND	_	_	
39	Date City Ryozen Town Ishida	2012/9/25	ND	ND	ND	_	_	
40	Date City Ryozen Town Ishida	2012/9/25	ND	ND	ND	_	_	
41	Date City Ryozen Town Ishida	2012/9/25	ND	ND	ND	_	_	
42	Date City Tsukidate Town Tsukidate	2012/9/25	ND	ND	ND	_	_	
43	Date City Tsukidate Town Tsukidate	2012/9/25	ND	ND	ND	_	_	
44	Date City Tsukidate Town Tsukidate	2012/9/25	ND	ND	ND	_	_	
45	Date City Tsukidate Town Tsukidate	2012/9/25	ND	ND	ND	_	_	
46	Date City Tsukidate Town Nunokawa	2012/9/25	ND	ND	ND	_	_	
47	Soma City Higashitamano	2012/9/24	ND	ND	ND	_	_	
48	Soma City Tamano	2012/9/24	ND	ND	ND	_	_	
49	Soma City Yamakami	2012/9/24	ND	ND	ND	_	_	
50	Soma City Yamakami	2012/9/24	ND	ND	ND	_	_	
51	Soma City Tomizawa	2012/9/24	ND	ND	ND	_	_	
52	Soma City Shiinoki	2012/9/24	ND	ND	ND	_	_	
53	Soma City Dozuki	2012/9/24	ND	ND	ND	_	_	
54	Kori Town Oaza Kitahanda	2012/9/25	ND	ND	ND	_	_	
55	Kawamata Town Yamakiya	2012/9/27	ND	ND	ND	_	_	Deliberate Evacuation Areas
56	Kawamata Town Yamakiya	2012/9/27	ND	ND	ND	_	_	Deliberate Evacuation Areas
57	Kawamata Town Kotsunagi	2012/9/27	ND	ND	ND	_	_	
58	Kawamata Town Kotsunagi	2012/9/27	ND	ND	ND	_	_	
59	Kawamata Town Kotsunagi	2012/9/27	ND	ND	ND	_	_	
60	Kawamata Town Kotsunagi	2012/9/27	ND	ND	ND	_	_	
61	Kawamata Town Kotsunagi	2012/9/27	ND	ND	ND	_	_	
62	Tamura City Miyakojii Town Iwaizawa	2012/9/27	ND	ND	ND	_	_	
63	Tamura City Miyakojii Town Iwaizawa	2012/9/27	ND	ND	ND	ND	ND	
64	Tamura City Miyakoji Town Furumichi	2012/9/27	ND	ND	ND	ND	ND	Areas being prepared for removal of evacuation orders
65	Tamura City Miyakoji Town Furumichi	2012/9/27	ND	ND	ND	ND	ND	
66	Tamura City Tokiwa Town Tokiwa	2012/9/27	ND	ND	ND	_	_	
67	Tamura City Funehiki Town Nakayama	2012/9/27	ND	ND	ND	ND	ND	
68	Aizuwakamatsu City Naka Town	2012/9/28	ND	ND	ND	_	_	
69	Kitakata City Matsuyama Village Oiizaka	2012/9/28	ND	ND	ND	_	_	
70	Kitashiobara Town Oaza Sekiya	2012/9/28	ND	ND	ND	_	_	

Note) Measurement results are indicated as ND when detected values were below the detection limit of activity concentrations (1 Bq/L). (Map attached)

(Attachment 3/4)

	its of Groundwater Monitoring	Sampling Date		(Attachment 5/4)				
No.	District			C	Cs	Sr		Remarks
			I-131	Cs-134	Cs-137	Sr-89	Sr-90	1
71	Nishiaizu Town Nozawa	2012/10/1	ND	ND	ND	_	_	
72	Bandai Town Otani	2012/9/28	ND	ND	ND	_	_	
73	Aizubange Town Tatenoshita	2012/9/28	ND	ND	ND	_	_	
74	Yukawa Village Hamazaki	2012/9/28	ND	ND	ND	_	_	
75	Yanaizu Town Hosohachi	2012/10/1	ND	ND	ND	_	_	
76	Mishima Town Kuwanohara	2012/10/1	ND	ND	ND	_	_	
77	Kaneyama Town Honna	2012/10/1	ND	ND	ND	_	_	
78	Showa Village Shimonakatsukawa	2012/10/1	ND	ND	ND	_	_	
79	Aizumisato Town Takada	2012/9/28	ND	ND	ND	_	_	
80	Tadami TownTadami	2012/10/2	ND	ND	ND	_	_	
81	Minamiaizu Town Mizuhiki Settlement	2012/10/2	ND	ND	ND	_	_	
82	Shimogo Town Ouchi	2012/10/2	ND	ND	ND	_	_	
83	Minamisoma City Kashima Ward Jisabara	2012/9/25	ND	ND	ND	_	_	
84	Minamisoma City Kashima Ward Kamitochikubo	2012/9/25	ND	ND	ND	_	_	
85	Minamisoma City Haramachi Ward Okido	2012/9/25	ND	ND	ND		_	
86	Minamisoma City Haramachi Ward Okido	2012/9/25	ND	ND	ND	_	_	
87	Minamisoma City Haramachi Ward Ishigami	2012/9/25	ND	ND	ND	_	_	
88	Minamisoma City Haramachi Ward Shidazawa	2012/9/25	ND	ND	ND		_	
89	Minamisoma City Haramachi Ward Fukono	2012/9/25	ND	ND	ND	_	_	
90	Minamisoma City Haramachi Ward Ota	2012/9/25	ND	ND	ND	_	_	
91	Minamisoma City Odaka Ward Otomi	2012/9/26	ND	ND	ND	ND	ND	Areas being prepared for removal of evacuation orders
92	Minamisoma City Odaka Ward Koyagi	2012/9/26	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
93	Naraha Town Oya	2012/10/2	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
94	Naraha Town Oya	2012/10/2	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
95	Naraha Town Kamikobana	2012/10/2	ND	ND	ND		_	Areas being prepared for removal of evacuation orders
96	Naraha Town Kamikobana	2012/10/2	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
97	Naraha Town Kamikobana	2012/10/2	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
98	Naraha Town Yamadaoka	2012/10/2	ND	ND	ND		_	Areas being prepared for removal of evacuation orders
99	Naraha Town Shimokobana	2012/10/2	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
100	Naraha Town Kamishigeoka	2012/10/2	ND	ND	ND	ND	ND	Areas being prepared for removal of evacuation orders
101	Tomioka Town Motooka	2012/9/27	ND	ND	ND	ND	ND	Restricted Areas
102	Tomioka Town Motooka	2012/9/27	ND	ND	ND	_	_	Restricted Areas
103	Tomioka Town Motooka	2012/9/27	ND	ND	ND	_	_	Restricted Areas
104	Kawauchi Village Shimokawauchi	2012/9/25	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
105	Kawauchi Village Shimokawauchi	2012/9/25	ND	ND	ND	_	_	

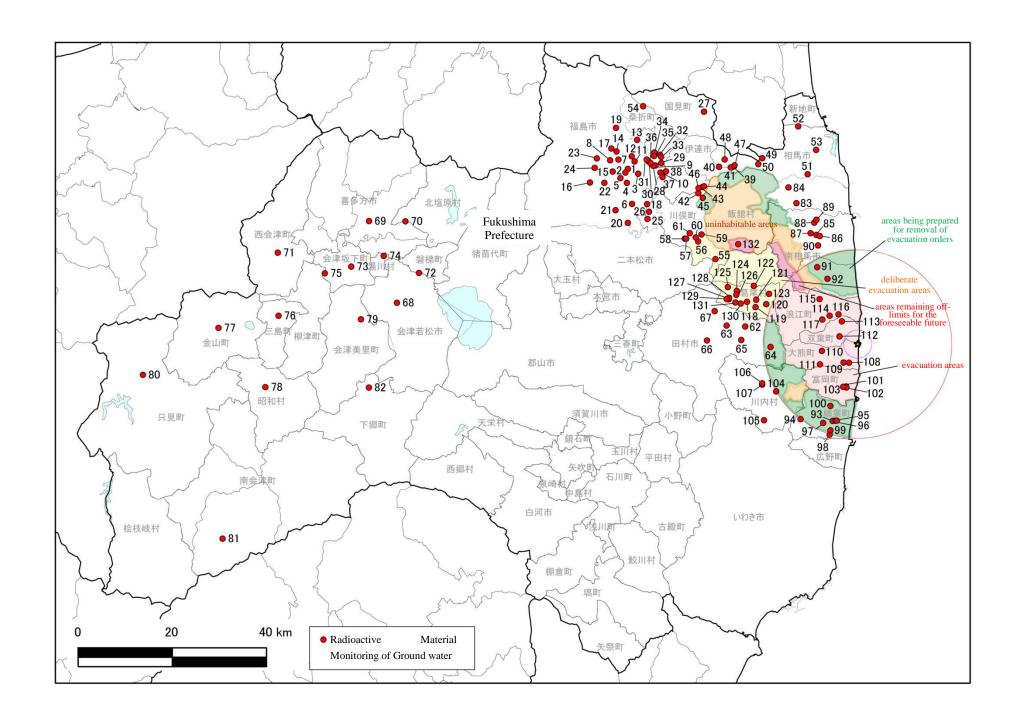
Note) Measurement results are indicated as ND when detected values were below the detection limit of activity concentrations (1 Bq/L). (Map attached)

## Results of Groundwater Monitoring

(Attachment 4/4)

	its of Groundwater Monitoring							(1 tttacililicit +/+
	District	Sampling Date						
No.			I-131	Cs		Sr		Remarks
				Cs-134	Cs-137	Sr-89	Sr-90	
106	Kawauchi Village Kamikawauchi	2012/9/25	ND	ND	ND	_	_	
107	Kawauchi Village Kamikawauchi	2012/9/25	ND	ND	ND	_	_	
108	Okuma Town Kuma	2012/10/1	ND	ND	ND	ND	ND	Restricted Areas
109	Okuma Town Kuma	2012/10/1	ND	ND	ND	ND	ND	Restricted Areas
110	Okuma Town Nogami	2012/10/1	ND	ND	ND	_	_	Restricted Areas
111	Okuma Town Ogawara	2012/10/1	ND	ND	ND	_	_	Restricted Areas
112	Futaba Town Mizusawa	2012/9/28	ND	ND	ND	_	_	Restricted Areas
113	Futaba Town Shibukawa	2012/9/28	ND	ND	ND		_	Restricted Areas
114	Namie Town Onoda	2012/9/27	ND	ND	ND	_	_	Restricted Areas
115	Namie Town Murohara	2012/9/27	ND	ND	ND	_	_	Restricted Areas
116	Namie Town Yatsuda	2012/9/27	ND	ND	ND	ND	ND	Restricted Areas
117	Namie Town Obori	2012/9/27	ND	ND	ND	_	_	Restricted Areas
118	Katsurao Village Ochiai	2012/9/25	ND	ND	ND	_	_	Deliberate Evacuation Areas
119	Katsurao Village Ochiai	2012/9/25	ND	ND	ND	_	_	Deliberate Evacuation Areas
120	Katsurao Village Ochiai	2012/9/25	ND	ND	ND	_	_	Deliberate Evacuation Areas
121	Katsurao Village Ochiai	2012/9/26	ND	ND	ND	_	_	Deliberate Evacuation Areas
122	Katsurao Village Katsurao	2012/9/25	ND	ND	ND	_	_	Deliberate Evacuation Areas
123	Katsurao Village Katsurao	2012/9/26	ND	ND	ND	ND	ND	Restricted Areas
124	Katsurao Village Katsurao	2012/9/25	ND	ND	ND	_	_	Deliberate Evacuation Areas
125	Katsurao Village Katsurao	2012/9/26	ND	ND	ND	_	_	Deliberate Evacuation Areas
126	Katsurao Village Katsurao	2012/9/26	ND	ND	ND		_	Deliberate Evacuation Areas
127	Katsurao Village Nogawa	2012/9/25	ND	ND	ND	_	_	Deliberate Evacuation Areas
128	Katsurao Village Nogawa	2012/9/26	ND	ND	ND	_	_	Deliberate Evacuation Areas
129	Katsurao Village Nogawa	2012/9/26	ND	ND	ND	_	_	Deliberate Evacuation Areas
130	Katsurao Village Nogawa	2012/9/26	ND	ND	ND	_	_	Deliberate Evacuation Areas
131	Katsurao Village Nogawa	2012/9/26	ND	ND	ND	_	_	Deliberate Evacuation Areas
132	Iitate Village Nagadoro	2012/9/27	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders

Note) Measurement results are indicated as ND when detected values were below the detection limit of activity concentrations (1 Bq/L). (Map attached)



District	No	District	№	District	No	District
Date City Hobara Town Tomizawa	57	Kawamata Town Kotsunagi	85	Minamisoma City Haramachi Ward Okido	113	Futaba Town Shibukawa
Date City Hobara Town Tomizawa	58	Kawamata Town Kotsunagi	86	Minamisoma City Haramachi Ward Okido	114	Namie Town Onoda
Date City Hobara Town Tomizawa	59	Kawamata Town Kotsunagi	87	Minamisoma City Haramachi Ward Ishigami	115	Namie Town Murohara
Date City Hobara Town Tomizawa	60	Kawamata Town Kotsunagi	88	Minamisoma City Haramachi Ward Shidazawa	116	Namie Town Yatsuda
Date City Hobara Town Tomizawa	61	Kawamata Town Kotsunagi	89	Minamisoma City Haramachi Ward Fukono	117	Namie Town Obori
Date City Hobara Town Tomizawa	62	Tamura City Miyakojii Town Iwaizawa	90	Minamisoma City Haramachi Ward Ota	118	Katsurao Village Ochiai
Date City Hobara Town Tomizawa	63	Tamura City Miyakojii Town Iwaizawa	91	Minamisoma City Odaka Ward Otomi	119	Katsurao Village Ochiai
Date City Hobara Town Takanarita	64	Tamura City Miyakoji Town Furumichi	92	Minamisoma City Odaka Ward Koyagi	120	Katsurao Village Ochiai
Date City Ryozen Town Kamioguni	65	Tamura City Miyakoji Town Furumichi	93	Naraha Town Oya	121	Katsurao Village Ochiai
Date City Ryozen Town Kamioguni	66	Tamura City Tokiwa Town Tokiwa	94	Naraha Town Oya	122	Katsurao Village Katsurao
Date City Ryozen Town Ishida	67	Tamura City Funehiki Town Nakayama	95	Naraha Town Kamikobana	123	Katsurao Village Katsurao
Date City Ryozen Town Ishida	68	Aizuwakamatsu City Naka Town	96	Naraha Town Kamikobana	124	Katsurao Village Katsurao
Date City Ryozen Town Ishida	69	Kitakata City Matsuyama Village Oiizaka	97	Naraha Town Kamikobana	125	Katsurao Village Katsurao
Date City Tsukidate Town Tsukidate	70	Kitashiobara Town Oaza Sekiya	98	Naraha Town Yamadaoka	126	Katsurao Village Katsurao
Date City Tsukidate Town Tsukidate	71	Nishiaizu Town Nozawa	99	Naraha Town Shimokobana	127	Katsurao Village Nogawa
Date City Tsukidate Town Tsukidate	72	Bandai Town Otani	100	Naraha Town Kamishigeoka	128	Katsurao Village Nogawa
Date City Tsukidate Town Tsukidate	73	Aizubange Town Tatenoshita	101	Tomioka Town Motooka	129	Katsurao Village Nogawa
Date City Tsukidate Town Nunokawa	74	Yukawa Village Hamazaki	102	Tomioka Town Motooka	130	Katsurao Village Nogawa
Soma City Higashitamano	75	Yanaizu Town Hosohachi	103	Tomioka Town Motooka	131	Katsurao Village Nogawa
Soma City Tamano	76	Mishima Town Kuwanohara	104	Kawauchi Village Shimokawauchi	132	Iitate Village Nagadoro
Soma City Yamakami	77	Kaneyama Town Honna	105	Kawauchi Village Shimokawauchi		
Soma City Yamakami	78	Showa Village Shimonakatsukawa	106	Kawauchi Village Oaza Kamikawauchi		
Soma City Tomizawa	79	Aizumisato Town Takada	107	Kawauchi Village Oaza Kamikawauchi		
Soma City Shiinoki	80	Tadami TownTadami	108	Okuma Town Kuma		
Soma City Dozuki	81	Minamiaizu Town Mizuhiki Settlement	109	Okuma Town Kuma		
Kori Town Oaza Kitahanda	82	Shimogo Town Ouchi	110	Okuma Town Nogami		
Kawamata Town Yamakiya	83	Minamisoma City Kashima Ward Jisabara	111	Okuma Town Ogawara		
Kawamata Town Yamakiya	84	Minamisoma City Kashima Ward Kamitochikubo	112	Futaba Town Mizusawa		