Results of Radioactive Material Monitoring of Groundwater (Report No. 11)

Friday, March 29, 2013

Office of Groundwater and Ground Environment,

Soil Environment Division,

Environmental Management Bureau,

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In accordance with the Comprehensive Radiation 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 Prefectures (from January 28 to February 2) are released here as Report No. 11.

Outline of Results

Measurement of I-131, Cs-134, and Cs-137 was conducted at 120 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

This is the final survey for FY2012, but in FY2013 onward, MOE intends to continue to monitor radioactivity concentrations in groundwater in and around Fukushima Prefecture, in coordination with the prefectural government, municipalities, and other relevant organizations.

*It was found that the news release "Results of Radioactive Material Monitoring of Groundwater (Report No. 10)" (released on February 15, 2013; "Report No. 10") announced that Sr-89 and Sr-90 were not detectable at eight locations in Koriyama City before the analysis results became available. However, the analysis results proved that fact, and the content of Report No. 10 need not be corrected.

(Annex 1/4)

	its of Groundwater Monitoring	Sampling Date						
No.	District		I-131	Cs		Sr		Remarks
				Cs-134	Cs-137	Sr-89	Sr-90	
1	Fukushima City Koshihama Town	2013/2/2	ND	ND	ND	_	_	
2	Fukushima City Watari	2013/2/2	ND	ND	ND	_	_	
3	Fukushima City Watari	2013/2/2	ND	ND	ND	_	_	
4	Fukushima City Oguraji	2013/2/2	ND	ND	ND	_	_	
5	Fukushima City Gonome	2013/2/2	ND	ND	ND	_	_	
6	Fukushima City Tazawa	2013/2/1	ND	ND	ND	_	_	
7	Fukushima City Oyama	2013/1/31	ND	ND	ND	_	_	
8	Fukushima City Minamisawamata	2013/1/31	ND	ND	ND	_	_	
9	Fukushima City Onami	2013/2/1	ND	ND	ND	_	_	
10	Fukushima City Onami	2013/2/1	ND	ND	ND	_	_	
11	Fukushima City Okabe	2013/2/2	ND	ND	ND	_	_	
12	Fukushima City Motouchi	2013/2/2	ND	ND	ND	_	_	
13	Fukushima City Senoue Town	2013/1/31	ND	ND	ND	_	_	
14	Fukushima City Minamiyanome	2013/1/31	ND	ND	ND	_	_	
15	Fukushima City Yagita	2013/1/31	ND	ND	ND	_	_	
16	Fukushima City Kaminagura	2013/2/2	ND	ND	ND	_	_	
17	Fukushima City Sasaya	2013/1/31	ND	ND	ND	_	_	
18	Fukushima City Tatsugoyama	2013/2/1	ND	ND	ND	_	_	
19	Fukushima City Iizaka Town	2013/1/31	ND	ND	ND	_	_	
20	Fukushima City Matsukawa Town	2013/2/1	ND	ND	ND	_	_	
21	Fukushima City Matsukawa Towni Sekiya	2013/2/1	ND	ND	ND	_	_	
22	Fukushima City Shimotoriwata	2013/2/2	ND	ND	ND	_	_	
23	Fukushima City Sasakino	2013/1/31	ND	ND	ND	_	_	
24	Fukushima City Kaminodera	2013/1/31	ND	ND	ND	_	_	
25	Fukushima City Iinomachi Town Meiji	2013/2/1	ND	ND	ND	_	_	
26	Fukushima City Iino Town Aoki	2013/2/1	ND	ND	ND	_	_	
27	Date City Yanagawa Town Yamafunyu	2013/1/28	ND	ND	ND	_	_	
28	Date City Hobara Town Tomizawa	2013/1/29	ND	ND	ND	_	_	
29	Date City Hobara Town Tomizawa	2013/1/29	ND	ND	ND	_	_	
30	Date City Hobara Town Tomizawa	2013/1/29	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)

(Annex 2/4)

		Sampling Date						
No.	District		I-131	Cs		Sr		Remarks
				Cs-134	Cs-137	Sr-89	Sr-90	
31	Date City Hobara Town Tomizawa	2013/1/29	ND	ND	ND	_	_	
32	Date City Hobara Town Tomizawa	2013/1/29	ND	ND	ND	_	_	
33	Date City Hobara Town Tomizawa	2013/1/29	ND	ND	ND	_	_	
34	Date City Hobara Town Tomizawa	2013/1/30	ND	ND	ND	_	_	
35	Date City Hobara Town Tomizawa	2013/1/30	ND	ND	ND	_	_	
36	Date City Hobara Town Takanarita	2013/1/29	ND	ND	ND	_	_	
37	Date City Ryozen Town Kamioguni	2013/1/29	ND	ND	ND	_	_	
38	Date City Ryozen Town Kamioguni	2013/1/29	ND	ND	ND	_	_	
39	Date City Ryozen Town Ishida	2013/1/28	ND	ND	ND	_	_	
40	Date City Ryozen Town Ishida	2013/1/28	ND	ND	ND	_	_	
41	Date City Ryozen Town Ishida	2013/1/28	ND	ND	ND	_	_	
42	Date City Tsukidate Town Tsukidate	2013/1/28	ND	ND	ND	_	_	
43	Date City Tsukidate Town Tsukidate	2013/1/28	ND	ND	ND	_	_	
44	Date City Tsukidate Town Tsukidate	2013/1/28	ND	ND	ND	_	_	
45	Date City Tsukidate Town Tsukidate	2013/1/29	ND	ND	ND	_	_	
46	Date City Tsukidate Town Nunokawa	2013/1/28	ND	ND	ND	_	_	
47	Soma City Higashitamano	2013/1/28	ND	ND	ND	_	_	
48	Soma City Tamano	2013/1/28	ND	ND	ND	_	_	
49	Soma City Yamakami	2013/1/28	ND	ND	ND	_	_	
50	Soma City Tomizawa	2013/1/28	ND	ND	ND	_	_	
51	Soma City Shiinoki	2013/1/28	ND	ND	ND	_	_	
52	Soma City Dozuki	2013/1/28	ND	ND	ND	_	_	
53	Shinchi Town Fukuda	2013/1/28	ND	ND	ND	_	_	
54	Shinchi Town Yachigoya	2013/1/28	ND	ND	ND	_	_	
55	Shinchi Town Mayumi	2013/1/28	ND	ND	ND	_	_	
56	Kori Town Kitahanda	2013/1/28	ND	ND	ND	_	_	
57	Kuni Town Fujita	2013/1/28	ND	ND	ND	_	_	
58	Kawamata Town Yamakiya	2013/1/30	ND	ND	ND	_	_	Deliberate Evacuation Areas
59	Kawamata Town Yamakiya	2013/1/30	ND	ND	ND	_	_	Deliberate Evacuation Areas
60	Kawamata Town Kotsunagi	2013/1/30	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)

(Annex 3/4)

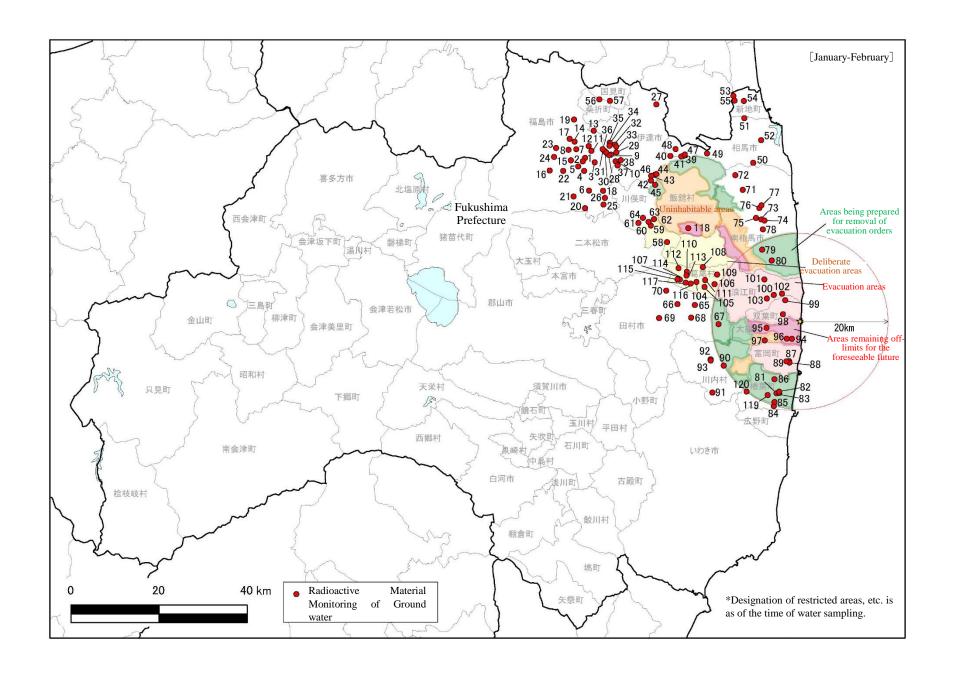
	Ţ.	Sampling Date						
No.	District		I-131	Cs		Sr		Remarks
				Cs-134	Cs-137	Sr-89	Sr-90	
61	Kawamata Town Kotsunagi	2013/1/30	ND	ND	ND	_	_	
62	Kawamata Town Kotsunagi	2013/1/30	ND	ND	ND	_	_	
63	Kawamata Town Kotsunagi	2013/1/30	ND	ND	ND	_	_	
64	Kawamata Town Kotsunagi	2013/1/30	ND	ND	ND	_	_	
65	Tamura City Miyakojii Town Iwaizawa	2013/1/28	ND	ND	ND	_	_	
66	Tamura City Miyakojii Town Iwaizawa	2013/1/28	ND	ND	ND	ND	ND	
67	Tamura City Miyakoji Town Furumichi	2013/1/28	ND	ND	ND	ND	ND	Areas being prepared for removal of evacuation orders
68	Tamura City Miyakoji Town Furumichi	2013/1/28	ND	ND	ND	ND	ND	
69	Tamura City Tokiwa Town Tokiwa	2013/2/2	ND	ND	ND	_	_	
70	Tamura City Funehiki Town Nakayama	2013/1/28	ND	ND	ND	ND	ND	
71	Minamisoma City Kashima Ward Jisabara	2013/1/29	ND	ND	ND	_	_	
72	Minamisoma City Kashima Ward Kamitochikubo	2013/1/29	ND	ND	ND	_	_	
73	Minamisoma City Haramachi Ward Okido	2013/1/29	ND	ND	ND	_	_	
74	Minamisoma City Haramachi Ward Okido	2013/1/29	ND	ND	ND	_	_	
75	Minamisoma City Haramachi Ward Ishigami	2013/1/29	ND	ND	ND	_	_	
76	Minamisoma City Haramachi Ward Shidazawa	2013/1/29	ND	ND	ND	_	_	
77	Minamisoma City Haramachi Ward Fukono	2013/1/29	ND	ND	ND	_	_	
78	Minamisoma City Haramachi Ward Ota	2013/1/29	ND	ND	ND	_	_	
79	Minamisoma City Odaka Ward Otomi	2013/1/29	ND	ND	ND	ND	ND	Areas being prepared for removal of evacuation orders
80	Minamisoma City Odaka Ward Koyagi	2013/1/29	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
81	Naraha Town Oya	2013/1/29	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
82	Naraha Town Kamikobana	2013/1/29	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
83	Naraha Town Kamikobana	2013/1/29	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
84	Naraha Town Yamadaoka	2013/1/29	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
85	Naraha Town Shimokobana	2013/1/29	ND	ND	ND	_	_	Areas being prepared for removal of evacuation orders
86	Naraha Town Kamishigeoka	2013/1/29	ND	ND	ND	ND	ND	Areas being prepared for removal of evacuation orders
87	Tomioka Town Motooka	2013/1/30	ND	ND	ND	ND	ND	Restricted Areas
88	Tomioka Town Motooka	2013/1/30	ND	ND	ND	_	_	Restricted Areas
89	Tomioka Town Motooka	2013/1/30	ND	ND	ND	_	_	Restricted Areas
90	Kawauchi Village Shimokawauchi	2013/1/28	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)

(Annex 4/4)

(Alliex 4/		(D /I)		A			its of Groundwater Mointoring	IXCSU
_			concentratio			Sampling Date	District	No.
Remarks	r Sr-90	Sr-89	Cs Cs-137	Cs-134	I-131			
		_	ND	ND	ND	2013/1/26	Kawauchi Village Shimokawauchi	91
			ND	ND	ND	2013/1/28	Kawauchi Village Kamikawauchi	92
	_	_	ND	ND	ND	2013/1/28	Kawauchi Village Kamikawauchi	93
reas being prepared for	ND	ND	ND	ND	ND	2013/1/30	Okuma Town Kuma	94
moval of evacuation orders reas being prepared for			ND	ND	ND	2013/1/30	Okuma Town Nogami	95
moval of evacuation orders reas being prepared for	ND	ND	ND	ND	ND	2013/1/30	Okuma Town Kuma	96
moval of evacuation orders ninhabitable are			ND	ND	ND	2013/1/30	Okuma Town Ogawara	97
Restricted Areas			ND	ND	ND	2013/1/31	Futaba Town Mizusawa	98
Restricted Areas	_	_	ND	ND	ND	2013/1/31	Futaba Town Shibukawa	99
Restricted Areas	_	_	ND	ND	ND	2013/1/31	Namie Town Onoda	100
Restricted Areas	_	_	ND	ND	ND	2013/1/31	Namie Town Murohara	101
Restricted Areas	ND	ND	ND	ND	ND	2013/1/31	Namie Town Yatsuda	102
Restricted Areas			ND	ND	ND	2013/1/31	Namie Town Obori	103
eliberate Evacuation Ar		_	ND	ND	ND	2013/1/31	Katsurao Village Ochiai	103
eliberate Evacuation Ar			ND	ND	ND	2013/1/31	Katsurao Village Ochiai	105
eliberate Evacuation Ar			ND	ND	ND	2013/1/31	Katsurao Village Ochiai	106
eliberate Evacuation Ar		_	ND	ND	ND	2013/1/31	Katsurao Village Nogawa	107
eliberate Evacuation Ar	_	_	ND	ND	ND	2013/1/31	Katsurao Village Katsurao	107
Restricted Areas	ND	ND	ND	ND	ND	2013/1/31	Katsurao Village Katsurao	109
eliberate Evacuation Ar			ND	ND	ND	2013/1/31	Katsurao Village Katsurao	110
eliberate Evacuation Ar			ND	ND	ND	2013/1/30	Katsurao Village Ochiai	111
eliberate Evacuation Ar	_		ND	ND	ND	2013/1/30	Katsurao Village Katsurao	112
eliberate Evacuation Ar			ND	ND	ND	2013/1/30	Katsurao Village Katsurao	113
eliberate Evacuation Ar			ND	ND	ND	2013/1/30	Katsurao Village Nogawa	114
eliberate Evacuation Ar		_	ND	ND	ND	2013/1/30	Katsurao Village Nogawa	115
eliberate Evacuation Ar								
eliberate Evacuation Ar								
reas being prepared for								
moval of evacuation orders reas being prepared for								
moval of evacuation orders reas being prepared for								
reas bein moval o reas bein moval o	- - - -	- - - -	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	2013/2/1 2013/2/1 2013/1/30 2013/1/29 2013/1/29	Katsurao Village Nogawa Katsurao Village Nogawa Iitate Village Nagadoro Naraha Town Kamikobana Naraha Town Oya	116 117 118 119 120

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



No.	District	No.	District	No.	District		District	
1	Fukushima City Koshihama Town	29	Date City Hobara Town Tomizawa	57	Kuni Town Fujita		Naraha Town Shimokobana	Ī
2	Fukushima City Watari	30	Date City Hobara Town Tomizawa	58	Kawamata Town Yamakiya	86	Naraha Town Kamishigeoka	Ī
3	Fukushima City Watari	31	Date City Hobara Town Tomizawa	59	Kawamata Town Yamakiya		Tomioka Town Motooka	Ī
4	Fukushima City Oguraji	32	Date City Hobara Town Tomizawa	60	Kawamata Town Kotsunagi	88	Tomioka Town Motooka	
5	Fukushima City Gonome	33	Date City Hobara Town Tomizawa	61	Kawamata Town Kotsunagi	89	Tomioka Town Motooka	
6	Fukushima City Tazawa	34	Date City Hobara Town Tomizawa	62	Kawamata Town Kotsunagi	90	Kawauchi Village Shimokawauchi	Ī
7	Fukushima City Oyama	35	Date City Hobara Town Tomizawa	63	Kawamata Town Kotsunagi	91	Kawauchi Village Shimokawauchi	
8	Fukushima City Minamisawamata	36	Date City Hobara Town Takanarita	64	Kawamata Town Kotsunagi	92	Kawauchi Village Kamikawauchi	
9	Fukushima City Onami	37	Date City Ryozen Town Kamioguni	65	Tamura City Miyakojii Town Iwaizawa	93	Kawauchi Village Kamikawauchi	
10	Fukushima City Onami	38	Date City Ryozen Town Kamioguni	66	Tamura City Miyakojii Town Iwaizawa	94	Okuma Town Kuma	
11	Fukushima City Okabe	39	Date City Ryozen Town Ishida	67	Tamura City Miyakoji Town Furumichi	95	Okuma Town Nogami	
12	Fukushima City Motouchi	40	Date City Ryozen Town Ishida	68	Tamura City Miyakoji Town Furumichi	96	Okuma Town Kuma	
13	Fukushima City Senoue Town	41	Date City Ryozen Town Ishida	69	Tamura City Tokiwa Town Tokiwa	97	Okuma Town Ogawara	
14	Fukushima City Minamiyanome	42	Date City Tsukidate Town Tsukidate	70	Tamura City Funehiki Town Nakayama	98	Futaba Town Mizusawa	
15	Fukushima City Yagita	43	Date City Tsukidate Town Tsukidate	71	Minamisoma City Kashima Ward Jisabara	99	Futaba Town Shibukawa	1
16	Fukushima City Kaminagura	44	Date City Tsukidate Town Tsukidate	72	Minamisoma City Kashima Ward Kamitochikubo	100	Namie Town Onoda	
17	Fukushima City Sasaya	45	Date City Tsukidate Town Tsukidate	73	Minamisoma City Haramachi Ward Okido	101	Namie Town Murohara	
18	Fukushima City Tatsugoyama	46	Date City Tsukidate Town Nunokawa	74	Minamisoma City Haramachi Ward Okido	102	Namie Town Yatsuda	1
19	Fukushima City Iizaka Town	47	Soma City Higashitamano	75	Minamisoma City Haramachi Ward Ishigami	103	Namie Town Obori	
20	Fukushima City Matsukawa Town	48	Soma City Tamano	76	Minamisoma City Haramachi Ward Shidazawa	104	Katsurao Village Ochiai	
21	Fukushima City Matsukawa Towni Sel	49	Soma City Yamakami	77	Minamisoma City Haramachi Ward Fukono	105	Katsurao Village Ochiai	
22	Fukushima City Shimotoriwata	50	Soma City Tomizawa	78	Minamisoma City Haramachi Ward Ota	106	Katsurao Village Ochiai	1
23	Fukushima City Sasakino	51	Soma City Shiinoki	79	Minamisoma City Odaka Ward Otomi	107	Katsurao Village Nogawa	Ī
24	Fukushima City Kaminodera	52	Soma City Dozuki	80	Minamisoma City Odaka Ward Koyagi	108	Katsurao Village Katsurao	
25	Fukushima City Iinomachi Town Meiji	53	Shinchi Town Fukuda	81	Naraha Town Oya	109	Katsurao Village Katsurao]
26	Fukushima City Iino Town Aoki	54	Shinchi Town Yachigoya	82	Naraha Town Kamikobana	110	Katsurao Village Katsurao]
27	Date City Yanagawa Town Yamafunyi	55	Shinchi Town Mayumi	83	Naraha Town Kamikobana	111	Katsurao Village Ochiai	1
28	Date City Hobara Town Tomizawa	56	Kori Town Kitahanda	84	Naraha Town Yamadaoka	112	Katsurao Village Katsurao]

District

113 Katsurao Village Katsurao
114 Katsurao Village Nogawa
115 Katsurao Village Nogawa
116 Katsurao Village Nogawa
117 Katsurao Village Nogawa
118 Iitate Village Nagadoro
119 Naraha Town Kamikobana

120 Naraha Town Oya

No.