

FY2012 Ibaraki Prefecture Survey Results

[Survey Results]

Radioactive iodine was not detectable at any of the locations tested.

Water Quality

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

Sediment

Rivers

Cs-134: ND-1,900Bq/kg (dried mud)

Cs-137: ND-2,900Bq/kg (dried mud)

Lakes and headwaters

Cs-134: 30-480Bq/kg (dried mud)

Cs-137: 57-820Bq/kg (dried mud)

Coasts

Cs-134: ND-28Bq/kg (dried mud)

Cs-137: ND-41Bq/kg (dried mud)

Surrounding Environment

(1) Soil

Rivers

Cs-134: 9.6-3,200Bq/kg (dry)

Cs-137: 17-5,100Bq/kg (dry)

Lakes and headwaters

Cs-134: ND -1,600Bq/kg (dry)

Cs-137: 8.1-2,800Bq/kg (dry)

(2) Spatial dose

Rivers

0.06-0.39 μ Sv/h

Lakes and headwaters

0.05-0.16 μ Sv/h

Table 4.4.1.1 Ibaraki Pref. River (Water Quality)

Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Water quality										Remarks			
No.	Water Body	Point	Municipality					General items						Radioactive material concentrations (Bq/L)							
								Water temperature °C	Sampling depth m	Color	Odor	Transparency cm	Electrical conductivity mS/m	SS mg/L	Turbidity	Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137				
R i v e r s	T a g a R i v e r S y s t e m	Satomegawa River	Yamagobashi Bridge	Kitabarakishi City	2012/05/30	Sunny	18.9	0.3	14.1	0.0	Greenish gray	None	47	9.7	7.1	2.5	<0.44	<0.61	<0.57		
					2012/09/26	Sunny	22.0	1.0	17.3	0.0	Yellowish pale gray	None	>100	12.5	5.1	0.9	<0.58	<0.82	<0.68		
					2012/12/10	Sunny	2.5	0.3	6.9	0.0	Yellowish white	None	>100	13.0	14	3.5	<0.67	<0.75	<0.71		
					2013/03/07	Sunny	10.0	0.3	11.5	0.0	Yellowish white	None	>100	12.7	<1	1.5	<0.57	<0.59	<0.59		
					2012/05/30	Sunny	20.0	0.6	18.2	0.0	Dark grayish yellow	None	60	14.4	8.1	4.0	<0.70	<0.73	<0.64		
					2012/09/26	Sunny	24.0	1.0	19.4	0.0	Greenish yellowish white	None	>100	21.1	2.4	1.0	<0.58	<0.66	<0.51		
		3	Hanazonogawa River	Kurabeishi	Kitabarakishi City	2012/12/10	Sunny	5.0	1.0	6.1	0.0	Greenish yellowish pale gray	None	>100	19.8	<1	0.5	<0.55	<0.56	<0.70	
						2013/02/07	Cloudy	7.7	0.3	7.8	0.0	Greenish yellowish white	None	>100	24.8	<1	0.6	<0.42	<0.77	<0.72	
						2012/05/30	Cloudy	17.0	0.3	14.1	0.0	Light grayish yellow	None	82	4.9	1.0	1.9	<0.53	<0.79	<0.60	
						2012/09/26	Sunny	23.0	1.0	16.9	0.0	Greenish yellowish white	None	>100	6.6	1.1	0.6	<0.48	<0.67	<0.54	
						2012/12/10	Snow	2.0	0.7	5.2	0.0	colorless transparent	None	>100	8.0	<1	0.4	<0.48	<0.67	<0.63	
						2013/02/07	Sunny	2.5	0.3	5.4	0.0	Greenish yellowish white	None	>100	10.0	6.1	2.2	<0.45	<0.53	<0.50	
	4	Honorebashi Bridge	Kitabarakishi City	Kitabarakishi City	2012/05/30	Cloudy	18.0	0.2	17.6	0.0	Light grayish yellow green	None	71	16.4	3.9	2.1	<0.56	<0.59	<0.66		
					2012/09/24	Cloudy	22.4	0.2	21.4	0.0	Yellowish pale gray	None	>100	25.1	4.3	1.4	<0.66	<0.63	<0.81		
					2012/12/10	Sunny	7.0	0.5	6.6	0.0	Light grayish yellow	None	80	33.7	5.5	2.8	<0.55	<0.60	<0.58		
					2013/02/08	Sunny	4.0	0.2	4.8	0.0	Grayish yellow	None	90	66.5	1.6	2.2	<0.52	<0.56	<0.59		
					2012/05/30	Cloudy	18.1	0.7	14.6	0.0	Light grayish yellow green	None	59	5.2	2.8	1.8	<0.41	<0.51	<0.42		
					2012/09/26	Sunny	21.0	1.3	15.9	0.0	Yellowish white	None	>100	6.7	1.1	0.5	<0.55	<0.61	<0.65		
	5	Okitagawa River	Sakaebashi Bridge	Takahagishi City	2012/12/10	Snow	2.0	1.0	4.6	0.0	Greenish yellowish white	None	>100	7.7	3.5	0.7	<0.53	<0.44	<0.63		
					2013/02/07	Cloudy	3.9	0.4	4.8	0.0	Greenish yellowish white	None	>100	8.2	<1	0.3	<0.52	<0.56	<0.60		
					2012/05/30	Cloudy, then sunny	19.4	0.8	17.4	0.0	Grayish reddish yellow	None	51	10.7	6.8	3.5	<0.57	<0.52	<0.78		
					2012/09/24	Cloudy	22.0	1.5	19.3	0.0	Grayish yellow	None	90	12.0	2.7	0.8	<0.49	<0.44	<0.67		
					2012/12/10	Sunny	7.0	1.0	5.9	0.0	colorless transparent	None	>100	13.5	2.1	1.0	<0.52	<0.59	<0.49		
					2013/02/08	Sunny	5.3	0.3	5.6	0.0	Light grayish yellow	None	>100	15.6	<1	0.8	<0.54	<0.70	<0.69		
			6	Sakaebashi Bridge	Kitabarakishi City	Kitabarakishi City	2012/05/30	Sunny	16.0	0.5	15.5	0.0	Grayish reddish yellow	None	29	7.6	6.7	2.7	<0.40	<0.56	<0.57
							2012/09/26	Sunny	24.0	1.2	21.2	0.0	Yellowish pale gray	None	95	10.7	6.6	1.9	<0.73	<0.91	<0.62
							2012/12/11	Sunny	8.1	0.6	8.1	0.0	colorless transparent	None	>100	14.5	<1	0.5	<0.57	<0.70	<0.62
							2013/02/08	Sunny	3.0	0.2	5.7	0.0	Light grayish greenish yellow	None	>100	17.6	1.1	1.2	<0.48	<0.65	<0.62
2012/05/31							Sunny	23.0	0.4	18.6	0.0	Light grayish yellow green	None	97	10.2	2.4	1.7	<0.61	<0.75	<0.68	
2012/09/27							Cloudy	24.0	1.5	22.7	0.0	Greenish yellowish light gray	None	85	13.3	7.2	0.9	<0.55	<0.70	<0.57	
7	Hanazonogawa River	Shinhanamakihashi Bridge	Takahagishi City	2012/12/05	Sunny	2.3	1.4	5.7	0.0	Greenish yellowish white	None	39	12.5	2.4	2.0	<0.69	<0.72	<0.76			
				2013/02/07	Cloudy	0.8	1.3	3.2	0.0	Greenish yellowish white	None	>100	16.1	1.0	1.0	<0.45	<0.66	<0.60			
				2012/05/31	Sunny	16.0	0.6	19.7	0.0	Yellow greenish white	None	56	17.1	3.4	2.1	<0.51	<0.61	<0.51			
				2012/06/26	Sunny	24.0	0.7	20.0	0.0	Yellow greenish white	None	90	12.7	5.2	1.9	<0.77	<0.75	<0.81			
				2012/07/19	Sunny	22.0	0.5	24.5	0.0	Dark yellow	None	35	18.1	4.5	1.1	<0.48	<0.56	<0.63			
				2012/08/20	Sunny	28.1	0.6	27.9	0.0	Light grayish yellow green	None	52	14.0	3.7	2.3	<0.55	<0.72	<0.59			
		8	Kujigawa River	Sakakibashi Bridge	Hitachishi City/Tokaimura Village	2012/09/11	Sunny	28.2	0.3	27.4	0.0	Light grayish yellow green	None	55	15.5	5.4	1.6	<0.61	<0.83	<0.75	
						2012/12/05	Sunny	9.0	0.6	8.2	0.0	Greenish yellowish white	None	76	15.7	2.0	1.1	<0.44	<0.65	<0.52	
						2013/02/08	Sunny	3.1	0.5	5.4	0.0	Dark grayish yellow green	None	94	18.1	6.8	2.4	<0.44	<0.63	<0.60	
						2012/05/31	Cloudy	21.8	1.0	20.8	0.0	Yellowish light gray	None	>100	13.5	1.2	1.6	<0.44	<0.65	<0.59	
						2012/09/27	Sunny	23.0	2.0	20.7	0.0	Yellowish light gray	None	>100	15.0	9.1	1.8	<0.40	<0.65	<0.55	
						2012/12/05	Sunny	10.0	1.7	9.6	0.0	Greenish yellowish white	None	>100	17.0	<1	0.7	<0.49	<0.61	<0.42	
9	Nakagawa River	Noguchi	Hitachiomiyashi City/ Shirotsomachi Town	2013/02/07	Sunny	8.4	0.4	7.4	0.0	Greenish yellowish white	None	>100	19.8	1.4	0.9	<0.51	<0.66	<0.49			
				2012/05/31	Cloudy, partly sunny	19.7	1.0	20.7	0.0	Dark grayish yellow green	None	>100	13.7	<1	0.9	<0.68	<0.78	<0.62			
				2012/09/27	Sunny	23.0	3.5	19.8	0.0	Yellowish pale gray	None	>100	14.9	1.5	0.8	<0.53	<0.66	<0.63			
				2012/12/07	Sunny	12.7	2.5	9.7	0.0	Yellowish white	None	>100	22.5	<1	0.8	<0.65	<0.78	<0.60			
				2013/02/07	Sunny	10.1	0.5	6.3	0.0	Greenish yellowish white	None	>100	20.6	2.5	1.0	<0.43	<0.63	<0.62			
				2012/05/31	Cloudy	21.8	1.0	20.8	0.0	Yellowish light gray	None	>100	13.5	1.2	1.6	<0.44	<0.65	<0.59			
		10	R i v e r s	N a k a g a w a	Shimokuni	Mitoshi City	2012/09/27	Sunny	23.0	2.0	20.7	0.0	Yellowish light gray	None	>100	15.0	9.1	1.8	<0.40	<0.65	<0.55
							2012/12/05	Sunny	10.0	1.7	9.6	0.0	Greenish yellowish white	None	>100	17.0	<1	0.7	<0.49	<0.61	<0.42
							2013/02/07	Sunny	8.4	0.4	7.4	0.0	Greenish yellowish white	None	>100	19.8	1.4	0.9	<0.51	<0.66	<0.49
							2012/05/31	Cloudy, partly sunny	19.7	1.0	20.7	0.0	Dark grayish yellow green	None	>100	13.7	<1	0.9	<0.68	<0.78	<0.62
							2012/09/27	Sunny	23.0	3.5	19.8	0.0	Yellowish pale gray	None	>100	14.9	1.5	0.8	<0.53	<0.66	<0.63
							2012/12/07	Sunny	12.7	2.5	9.7	0.0	Yellowish white	None	>100	22.5	<1	0.8	<0.65	<0.78	<0.60
11	S y s t e m	N a k a g a w a	Shimokuni	Mitoshi City	2013/02/07	Sunny	10.1	0.5	6.3	0.0	Greenish yellowish white	None	>100	20.6	2.5	1.0	<0.43	<0.63	<0.62		

Table 4.4.1.1 Ibaraki Pref. River (Water Quality)

Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Water quality										Remarks		
No.	Water Body	Point	Municipality					General items						Radioactive material concentrations (Bq/L)						
								Water temperature °C	Sampling depth m	Color	Odor	Transparency cm	Electrical conductivity mS/m	SS mg/L	Turbidity	Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137			
R i v e r S y s t e m	N a k a g a w a R i v e r	Nakagawa River	Katsutabashi Bridge	Mitsui City/ Hitachinaka City	2012/05/31	Sunny	17.3	0.5	21.3	0.0	Grayish yellow green	None	70	18.5	2.5	1.8	<0.53	<0.56	<0.51	
					2012/06/26	Sunny	22.0	6.8	19.0	0.0	Yellowish white	None	90	14.8	3.7	1.9	<0.48	<0.67	<0.50	
					2012/07/19	Cloudy	27.0	1.5	25.2	0.0	Yellowish greenish white	None	40	65.8	14	4.0	<0.49	<0.58	<0.49	
					2012/08/20	Sunny	33.0	7.0	26.4	0.0	Yellowish pale gray	None	72	18.0	1.6	1.2	<0.46	<0.65	<0.54	
					2012/09/11	Sunny	28.5	0.4	27.7	0.0	Greenish yellowish white	None	>100	102.5	1.5	1.0	<0.41	<0.65	<0.62	
					2012/12/07	Sunny	5.8	7.0	9.6	0.0	Yellowish white	None	>100	190.7	1.3	1.5	<0.46	<0.67	<0.64	
	2013/02/07	Sunny	7.4	4.5	7.8	0.0	Greenish yellowish white	None	>100	379	<1	1.1	<0.47	<0.67	<0.60					
	R i v e r	Nakamagawa River	Yanagisawabashi Bridge	Hitachinaka City	2012/05/31	Sunny	19.6	1.1	22.3	0.0	Dark grayish yellow	Faint sewage	40	47.8	9.0	5.8	<0.47	<0.67	<0.50	
					2012/09/28	Rain	22.0	1.2	24.0	0.0	Grayish greenish yellow	Sewage	50	124.1	8.1	3.1	<0.67	<0.67	<0.66	
					2012/12/06	Sunny	10.8	2.0	9.9	0.0	Greenish yellowish white	None	57	1,070	8.1	3.3	<0.44	<0.65	<0.62	
	S y s t e m	H i m u m a g a w a R i v e r	Hinomatsukawa River	Nagaokabashi Bridge	Ibaraki City	2013/02/07	Sunny	4.4	1.4	7.6	0.0	Light grayish greenish yellow	Faint redness	67	291	3.4	3.6	<0.58	<0.72	<0.68
						2012/06/11	Sunny	23.3	0.2	23.0	0.0	Yellowish pale gray	None	65	17.4	10	4.3	<0.54	<0.76	<0.59
2012/12/06						Sunny	14.7	0.3	12.6	0.0	Greenish yellowish white	None	71	26.5	2.7	2.6	<0.53	<0.70	<0.59	
2012/06/11						Cloudy	23.0	0.8	22.9	0.0	Yellowish white	None	59	17.7	6.1	2.7	<0.47	<0.56	<0.42	
2012/12/07						Sunny	3.1	0.5	7.1	0.0	Greenish yellowish white	None	>100	23.9	<1	1.1	<0.62	<0.78	<0.60	
2012/06/12						Cloudy	15.8	0.2	17.3	0.0	Grayish yellow green	None	44	20.7	6.8	3.5	<0.59	<0.56	<0.64	
R i v e r		K a n s e i g a w a R i v e r	Kanseibashi Bridge	Hokotashi City	2012/12/06	Sunny	13.5	0.3	13.0	0.0	Greenish yellowish white	None	>100	36.6	2.1	1.1	<0.56	<0.83	<0.64	
					2012/06/05	Sunny	26.0	1.0	18.4	0.0	Very dark greenish yellow	None	70	33.9	3.2	2.9	<0.54	<0.56	<0.57	
					2012/12/06	Sunny	15.3	0.5	12.4	0.0	Greenish yellowish white	None	>100	37.8	1.0	0.9	<0.46	<0.67	<0.44	
					2012/06/05	Sunny	26.0	0.3	22.6	0.0	Very dark yellow	None	14	393	4.9	7.3	<0.54	<0.56	<0.57	
					2012/09/28	Rain	22.0	2.0	21.8	0.0	Grayish greenish yellow	None	35	1,940	7.5	2.1	<0.46	<0.69	<0.49	
					2012/12/06	Sunny	12.4	1.1	12.4	0.0	Greenish yellowish white	None	>100	3,170	5.2	4.5	<0.54	<0.70	<0.63	
T o n e g a w a R i v e r	H o k o t a g a w a R i v e r	Asahibashi Bridge	Hokotashi City	2013/02/07	Cloudy	1.8	0.4	8.1	0.0	Yellow greenish white	Sewage	>100	2,790	3.8	2.5	<0.46	<0.63	<0.60		
				2012/06/06	Light rain	21.0	0.9	18.1	0.0	Dark greenish yellow	None	55	35.4	5.4	2.7	<0.51	<0.68	<0.65		
				2012/09/26	Sunny	28.0	1.2	20.9	0.0	Yellowish white	None	77	41.4	3.1	1.8	<0.53	<0.61	<0.64		
				2012/12/06	Sunny	14.7	1.5	11.7	0.0	Yellowish white	None	73	48.2	2.9	2.1	<0.44	<0.51	<0.50		
				2013/02/08	Cloudy	2.7	1.2	7.7	0.0	Light grayish yellow	None	>100	41.4	3.5	2.0	<0.54	<0.51	<0.60		
				2012/06/06	Cloudy	20.0	0.8	18.6	0.0	Dark grayish yellow	None	68	25.3	5.1	3.5	<0.50	<0.60	<0.60		
	K i t a u r a R i v e r	T o n e g a w a R i v e r	Shinomogawabashi Bridge	Hokotashi City	2012/09/26	Sunny	25.0	0.5	20.6	0.0	Yellowish white	None	77	30.8	1.1	3.1	<0.48	<0.61	<0.59	
					2012/12/06	Sunny	14.4	1.2	11.9	0.0	Yellowish white	None	>100	39.9	3.9	2.3	<0.55	<0.66	<0.65	
					2013/02/08	Cloudy	3.7	0.4	8.5	0.0	Light grayish yellow	None	85	31.7	6.4	3.2	<0.59	<0.57	<0.55	
					2012/06/06	Light rain	21.0	0.4	16.6	0.0	Dull yellow green	None	>100	25.0	4.8	3.6	<0.66	<0.83	<0.64	
					2012/09/27	Sunny	24.0	0.5	18.2	0.0	Greenish yellowish white	None	>100	28.4	3.9	1.6	<0.62	<0.78	<0.73	
					2012/12/06	Sunny	11.0	0.2	13.6	0.0	Yellowish white	None	>100	78.5	4.3	2.4	<0.53	<0.63	<0.66	
S y s t e m	T a k e d a g a w a R i v e r	Uchijukuhashi Bridge	Namegata City	2013/02/08	Cloudy	5.0	0.3	9.5	0.0	Yellowish white	None	>100	29.3	2.0	1.7	<0.43	<0.60	<0.60		
				2012/06/06	Light rain	21.0	0.5	17.7	0.0	Dark grayish greenish yellow	None	51	26.9	5.6	2.6	<0.54	<0.53	<0.60		
				2012/09/26	Sunny	25.0	0.7	21.1	0.0	Yellowish white	None	34	31.5	1.6	4.5	<0.47	<0.65	<0.59		
				2012/12/12	Sunny	12.1	0.3	10.9	0.0	Grayish yellow	None	72	32.5	3.1	1.8	<0.65	<0.92	<0.54		
				2013/02/08	Sunny	5.0	0.3	8.1	0.0	Reddish yellowish white	None	>100	31.5	<1	1.4	<0.60	<0.61	<0.63		
				2012/06/06	Cloudy	21.0	0.2	19.1	0.0	Dark yellow green	None	45	28.9	6.2	3.4	<0.53	<0.63	<0.52		
	S y s t e m	Y a m a g a w a R i v e r	Nioroshihashi Bridge	Namegata City	2012/09/27	Sunny	25.0	0.5	19.7	0.0	Light grayish greenish yellow	None	22	31.9	20	5.9	<0.51	<0.72	<0.49	
					2012/12/12	Sunny	11.4	0.3	9.9	0.0	Grayish greenish yellow	None	19	30.6	2.6	1.8	<0.49	<0.44	<0.49	
					2013/02/14	Cloudy	5.3	0.3	6.3	0.0	Grayish greenish yellow	None	12	33.0	30	33	<0.38	<0.98	<0.64	
					2012/06/06	Sunny	21.0	1.0	20.2	0.0	Dark grayish greenish yellow	None	27	26.9	12	6.8	<0.70	<0.72	<0.64	
					2012/09/27	Sunny	26.0	0.4	20.5	0.0	Light grayish yellow	None	38	31.5	1.5	4.0	<0.57	<0.59	<0.62	
					2012/12/14	Sunny	6.3	0.3	6.3	0.0	Dark grayish yellow green	None	28	35.5	3.5	6.6	<0.54	<0.53	<0.60	
S y s t e m	K u r a k a w a R i v e r	Kurakawabashi Bridge	Namegata City	2013/02/14	Cloudy	5.8	0.5	6.5	0.0	Dark grayish greenish yellow	None	93	36.4	3.5	2.2	<0.50	<0.53	<0.64		
				2012/06/06	Cloudy	21.0	0.2	20.8	0.0	Grayish yellow	None	45	26.8	1.1	6.7	<0.60	<0.59	<0.60		
				2012/09/27	Cloudy	26.0	0.1	21.9	0.0	Light grayish yellow	None	42	27.7	1.9	3.4	<0.68	<0.85	<0.64		
				2012/12/14	Sunny	9.1	0.2	9.9	0.0	Light grayish greenish yellow	None	77	34.6	2.4	2.7	<0.63	<0.75	<0.68		
				2013/02/14	Cloudy	7.7	0.2	8.4	0.0	Dark grayish reddish yellow	None	63	36.3	3.2	3.1	<0.55	<0.64	<0.60		
				2012/06/06	Cloudy	21.0	0.2	20.8	0.0	Grayish yellow	None	45	26.8	1.1	6.7	<0.60	<0.59	<0.60		
S y s t e m	G a n t s u g a w a R i v e r	JA Yokohashi	Namegata City	2012/09/27	Cloudy	26.0	0.1	21.9	0.0	Light grayish yellow	None	42	27.7	1.9	3.4	<0.68	<0.85	<0.64		
				2012/12/14	Sunny	9.1	0.2	9.9	0.0	Light grayish greenish yellow	None	77	34.6	2.4	2.7	<0.63	<0.75	<0.68		
				2013/02/14	Cloudy	7.7	0.2	8.4	0.0	Dark grayish reddish yellow	None	63	36.3	3.2	3.1	<0.55	<0.64	<0.60		

Table 4.4.1.1 Ibaraki Pref. River (Water Quality)

Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Water quality										Remarks		
No.	Water Body		Municipality					General items						Radioactive material concentrations (Bq/L)						
	Point							Water temperature °C	Sampling depth m	Color	Odor	Transparency cm	Electrical conductivity mS/m	SS mg/L	Turbidity	I-131	Cs-134 Cs-137			
R i v e r s	26	Kitara Lake	Nagaregawa River	Suboibashi Bridge	Kashimashi City	2012/06/07	Sunny	21.0	0.1	18.1	0.0	Dark yellow	None	73	40.9	3.4	3.6	<0.42	<0.65	<0.52
						2012/09/27	Sunny	25.0	0.1	21.4	0.0	Yellowish white	Faint sewage	>100	44.9	3.2	1.5	<0.50	<0.68	<0.49
						2012/12/12	Sunny	4.6	0.2	9.5	0.0	Grayish yellow	None	>100	46.1	2.7	2.1	<0.53	<0.61	<0.63
						2013/02/15	Rain	10.7	0.2	9.1	0.0	Light grayish yellow	None	>100	50.8	2.3	2.0	<0.55	<0.78	<0.58
	27	Sonobegawa River	Sonobeshinbashi Bridge	Omitamashi City	2012/05/30	Sunny	24.2	2.2	19.2	0.0	Grayish reddish yellow	None	19	14.5	39	15	<0.73	<0.60	<0.60	
					2012/09/26	Sunny	26.0	1.3	19.9	0.0	Greenish yellowish white	None	79	29.4	7.2	3.0	<0.45	<0.56	<0.54	
					2012/12/10	Sunny	7.0	0.8	6.9	0.0	Dark grayish yellow	None	65	33.4	4.7	3.3	<0.55	<0.92	<0.68	
					2013/02/13	Sunny	11.2	1.3	9.6	0.0	Dark grayish greenish yellow	None	27	32.9	16	10	<0.57	<0.77	<0.66	
	28	Sarnogawa River	Tokorobashi Bridge	Omitamashi City	2012/05/30	Cloudy	24.3	1.2	21.1	0.0	Light grayish yellow	None	32	22.0	15	3.6	<0.64	<0.66	<0.62	
					2012/09/26	Sunny	27.0	1.4	21.7	0.0	Yellowish white	None	>100	89.0	2.3	2.0	<0.62	<0.83	<0.58	
					2012/12/10	Sunny	2.0	0.5	6.8	0.0	Yellowish white	None	70	93.4	2.6	1.6	<0.58	<0.70	<0.73	
					2013/02/13	Sunny	10.7	0.6	9.9	0.0	Dark grayish yellow	Sewage	33	23.6	8.7	5.9	<0.65	<0.78	<0.62	
29	Koiegawa River	Heiwabashi Bridge	Ishiohashi City	2012/05/30	Cloudy	22.8	1.0	20.2	0.0	Light grayish yellow	Faint sewage	17	14.6	41	18	<0.50	<0.70	<0.63		
				2012/09/26	Sunny	20.0	0.1	19.1	0.0	Yellowish white	None	75	17.1	27	5.4	<0.60	<0.84	<0.62		
				2012/12/10	Sunny	5.3	0.3	4.1	0.0	Yellowish white	None	73	21.3	2.4	2.0	<0.49	<0.69	<0.54		
30	Kajinagawa River	Kamishukubashi Bridge	Namegatah City	2012/05/29	Sunny	24.5	0.7	23.4	0.0	Light grayish greenish yellow	None	39	30.6	17	6.3	<0.64	<0.70	<0.76		
				2012/09/26	Sunny	25.0	1.1	21.2	0.0	Greenish yellowish white	None	>100	39.3	3.6	1.6	<0.66	<0.80	<0.64		
				2012/12/12	Sunny	8.2	0.3	10.3	0.0	Grayish greenish yellow	None	65	49.0	3.9	2.3	<0.56	<0.68	<0.51		
				2013/02/13	Sunny	8.0	0.5	11.0	0.0	Dark grayish greenish yellow	None	30	36.9	48	18	<0.51	<0.65	<0.63		
31	Hishikigawa River	Hshikibashi Bridge	Kasumigaaurashi City	2012/05/30	Sunny	23.0	1.0	23.5	0.0	Grayish reddish yellow	None	19	16.7	29	11	<0.58	<0.61	<0.60		
				2012/09/25	Cloudy	21.0	0.3	21.0	0.0	Yellowish white	None	98	26.0	4.5	1.4	<0.51	<0.66	<0.51		
				2012/12/12	Sunny	6.5	0.2	5.8	0.0	Grayish yellow	None	>100	29.4	<1	0.9	<0.62	<0.78	<0.66		
				2013/02/13	Sunny	10.7	0.4	9.6	0.0	Dark grayish yellow	None	24	21.8	33	12	<0.51	<0.69	<0.57		
32	Ichinogawa River	Kawakabashi Bridge	Kasumigaaurashi City	2012/05/29	Cloudy	23.9	1.6	24.7	0.0	Grayish yellow	Faint mold	31	23.7	16	7.2	<0.57	<0.78	<0.71		
				2012/09/25	Cloudy	22.0	1.2	21.0	0.0	Light grayish yellow	None	28	25.8	18	4.8	<0.50	<0.58	<0.59		
				2012/12/12	Sunny	8.1	1.2	6.5	0.0	Grayish yellow green	None	33	31.6	7.0	6.1	<0.48	<0.60	<0.61		
				2013/02/13	Sunny	10.2	1.3	9.6	0.0	Dark grayish greenish yellow	None	18	27.2	40	26	<0.57	<0.59	<0.63		
33	Sakagawa River	Sakabashi Bridge/National Route 354	Tsuchiurashi City	2012/05/29	Cloudy	30.0	0.8	24.6	0.0	Grayish yellow	Faint sewage	44	34.3	9.4	3.4	<0.51	<0.59	<0.59		
				2012/09/25	Cloudy	21.0	0.4	21.8	0.0	Light grayish greenish yellow	None	54	32.0	3.2	1.6	<0.55	<0.53	<0.63		
				2012/12/11	Sunny	12.0	0.4	19.6	0.0	Grayish yellow	Faint sewage	18	49.6	13	13	<0.52	<0.53	<0.62		
				2013/02/12	Cloudy	4.0	0.4	10.3	0.0	Dark grayish yellow	None	18	52.1	11	11	<0.63	<0.69	<0.73		
34	Shinkawa River	Shintenbashi Bridge	Tsuchiurashi City	2012/05/29	Sunny	28.0	2.2	24.7	0.0	Grayish yellow	Faint mold	44	27.4	9.1	5.7	<0.59	<0.78	<0.62		
				2012/09/25	Cloudy	22.0	1.9	21.9	0.0	Light grayish yellow	None	28	28.3	11	5.6	<0.58	<0.75	<0.78		
				2012/12/11	Sunny	6.8	1.5	8.2	0.0	Dark grayish greenish yellow	None	43	44.1	6.0	5.6	<0.62	<0.66	<0.56		
				2013/02/12	Cloudy	6.4	1.5	7.6	0.0	Dark grayish yellow green	None	36	47.6	6.1	6.3	<0.50	<0.53	<0.52		
35	Sakuragawa River	Eiribashi Bridge	Tsuchiurashi City/Tsukubashi City	2012/05/29	Sunny	26.5	1.0	21.7	0.0	Light grayish yellow	None	42	21.1	8.3	3.4	<0.60	<0.70	<0.65		
				2012/09/25	Cloudy	22.0	0.5	20.6	0.0	Light grayish greenish yellow	None	25	24.3	20	4.0	<0.50	<0.63	<0.59		
				2012/12/11	Sunny	4.2	0.2	7.0	0.0	Dark grayish yellow green	None	94	31.7	3.8	2.7	<0.52	<0.68	<0.62		
				2013/02/13	Sunny	8.6	0.5	7.2	0.0	Dark grayish yellow	None	32	31.3	7.9	6.2	<0.54	<0.68	<0.49		
36	Bizengawa River	Bizengawabashi Bridge	Tsuchiurashi City	2012/05/30	Sunny	24.0	0.8	23.0	0.0	Light grayish reddish yellow	None	28	26.4	17	8.3	<0.65	<0.78	<0.62		
				2012/09/25	Cloudy	20.0	0.8	21.8	0.0	Yellowish white	None	38	20.7	8.8	3.0	<0.46	<0.56	<0.51		
				2012/12/11	Sunny	10.6	0.7	7.3	0.0	Dark grayish yellow green	None	42	40.4	9.2	5.7	<0.60	<0.75	<0.73		
				2013/02/12	Cloudy	6.7	1.5	6.3	0.0	Dark grayish greenish yellow	None	30	40.7	8.2	5.6	<0.55	<0.83	<0.58		
37	Hanamogawa River	Shinwabashi Bridge	Tsuchiurashi City	2012/05/31	Sunny	22.5	0.8	21.6	0.0	Light grayish greenish yellow	None	41	23.7	12	6.3	<0.50	<0.64	<0.60		
				2012/09/25	Cloudy	20.0	1.0	20.6	0.0	Yellowish white	None	52	22.6	9.1	3.3	<0.48	<0.50	<0.64		
				2012/12/11	Sunny	11.2	0.2	9.7	0.0	Dark grayish greenish yellow	None	53	43.6	12	6.8	<0.46	<0.60	<0.50		
				2013/02/12	Cloudy	6.4	0.4	7.5	0.0	Dark grayish yellow green	None	70	40.6	2.4	2.9	<0.46	<0.70	<0.59		
38	Seimeigawa River	Katsubashi Bridge	Amimachi Town	2012/05/31	Sunny	23.0	0.8	22.6	0.0	Light grayish greenish yellow	None	37	21.7	9.5	3.6	<0.69	<0.75	<0.71		
				2012/09/24	Sunny	23.0	0.5	24.4	0.0	Light grayish yellow	None	36	29.7	10	3.4	<0.64	<0.80	<0.54		
				2012/12/10	Sunny	8.3	0.4	9.0	0.0	Dark grayish greenish yellow	None	45	45.9	13	5.6	<0.44	<0.72	<0.52		
				2013/02/12	Cloudy	6.7	0.4	6.4	0.0	Grayish greenish yellow	None	60	46.8	5.7	5.1	<0.51	<0.59	<0.69		

Table 4.4.1.1 Ibaraki Pref. River (Water Quality)

No.	Sampling point			Sampling date	Weather	Air temperature °C	Full depth m	Water quality										Remarks
	Water Body	Point	Municipality					General items						Radioactive material concentrations (Bq/L)				
								Water temperature °C	Sampling depth m	Color	Odor	Transparency cm	Electrical conductivity mS/m	SS mg/L	Turbidity	I-131	Radioactive cesium Cs-134 Cs-137	
39	Kasumigaura River	Okuharaohashi Bridge	Ryugasaki City/Utsukushi City	2012/05/31	Cloudy	24.2	0.4	20.9	0.0	Light grayish greenish yellow	Earth	31	25.8	15	5.7	<0.60	<0.59	<0.68
				2012/09/24	Sunny	24.0	0.2	23.7	0.0	Yellowish white	None	33	37.6	11	3.6	<0.52	<0.64	<0.60
				2012/12/10	Sunny	5.0	0.3	6.9	0.0	Dark grayish greenish yellow	None	61	63.9	3.1	2.5	<0.56	<0.66	<0.59
				2013/02/12	Cloudy	6.9	0.4	6.9	0.0	Dark grayish yellow green	None	68	51.8	4.0	3.0	<0.59	<0.75	<0.78
40	Shintonegawa River	Shintonehoshi Bridge	Inashiki City	2012/05/31	Cloudy	25.8	0.6	22.2	0.0	Light grayish greenish yellow	Seaweed	23	20.6	19	16	<0.57	<0.71	<0.63
				2012/09/24	Cloudy	26.0	1.2	26.3	0.0	Light grayish yellow	None	35	52.5	10	6.6	<0.63	<0.70	<0.56
				2012/12/14	Sunny	9.3	2.0	7.8	0.0	Dark grayish greenish yellow	None	43	59.1	6.2	7.1	<0.47	<0.59	<0.54
				2013/02/14	Cloudy	7.7	2.0	7.2	0.0	Dark grayish greenish yellow	None	46	67.6	6.7	6.5	<0.50	<0.61	<0.63
41	Yokokoshigawa River	Horimouchibashi Bridge	Itakoshi City	2012/06/07	Sunny	22.0	0.5	18.9	0.0	Dull greenish yellow	None	28	32.7	14	7.3	<0.59	<0.80	<0.71
				2012/09/13	Sunny	31.4	0.5	25.2	0.0	Light grayish greenish yellow	None	32	31.8	14	5.3	<0.68	<0.72	<0.75
				2012/12/14	Sunny	2.1	0.5	5.6	0.0	Light grayish yellow green	None	90	35.5	2.4	2.5	<0.46	<0.56	<0.56
				2013/02/14	Cloudy	8.9	0.4	7.7	0.0	Grayish greenish yellow	None	32	40.3	2.1	1.3	<0.47	<0.60	<0.57
42	Mackawa River	Ayamebashi Bridge	Itakoshi City	2012/06/07	Sunny	22.0	3.0	22.7	0.0	Dark yellow green	None	29	32.5	7.9	5.2	<0.51	<0.59	<0.65
				2012/09/13	Sunny	33.2	2.0	29.3	0.0	Grayish yellow green	None	26	32.6	15	6.6	<0.45	<0.58	<0.60
				2012/12/14	Sunny	4.0	2.5	6.5	0.0	Dark grayish greenish yellow	None	30	43.0	11	7.3	<0.48	<0.70	<0.55
				2013/02/15	Cloudy	8.3	2.5	7.4	0.0	Dark grayish greenish yellow	None	28	46.0	15	12	<0.55	<0.61	<0.59
43	Kinugawa River	Kawahimabashi Bridge	Chikusetsu City	2012/06/05	Sunny	25.0	1.0	20.4	0.0	Dark grayish bluish green	None	>100	14.5	-1	0.9	<0.46	<0.60	<0.47
				2012/09/12	Sunny	28.9	0.7	26.5	0.0	Greenish yellowish pale gray	None	90	16.8	5.7	1.1	<0.51	<0.66	<0.59
				2012/12/19	Sunny	6.2	0.5	9.6	0.0	Grayish yellow green	None	89	23.7	2.6	1.3	<0.55	<0.59	<0.53
				2013/02/12	Cloudy	3.3	0.7	7.3	0.0	Light grayish yellow green	None	>100	19.8	1.7	0.9	<0.62	<0.80	<0.73
44	Kinugawa River	Takishitabashi Bridge	Moriyoshi City	2012/06/01	Cloudy	23.2	0.5	20.2	0.0	Greenish yellowish white	None	47	16.8	3.3	2.7	<0.70	<0.73	<0.71
				2012/06/22	Light rain	26.0	1.0	18.0	0.0	Grayish yellow	None	6	9.9	130	41	<0.44	<0.64	<0.59
				2012/07/20	Cloudy	22.0	1.5	23.7	0.0	Yellow greenish pale gray	None	44	19.2	9.1	5.9	<0.48	<0.66	<0.62
				2012/08/24	Sunny	34.3	3.0	29.8	0.0	Grayish yellow green	None	27	24.1	4.6	2.7	<0.60	<0.78	<0.73
45	Tagawa River	Tagawabashi Bridge	Chikusetsu City	2012/09/13	Sunny	28.2	0.2	26.2	0.0	Yellow greenish pale gray	None	62	18.3	6.7	1.5	<0.53	<0.63	<0.63
				2012/12/20	Sunny	5.9	0.3	8.3	0.0	Dark grayish greenish yellow	None	53	26.5	2.9	1.6	<0.46	<0.58	<0.50
				2013/02/13	Sunny	7.7	0.5	8.7	0.0	Greenish yellowish dark gray	None	53	25.9	12	5.0	<0.57	<0.61	<0.53
				2012/06/05	Sunny	24.0	10.0	21.1	0.0	Dark greenish yellow	None	>100	22.5	3.0	2.0	<0.59	<0.78	<0.54
46	Kokaga River	Kurokobashi Bridge	Chikusetsu City	2012/09/12	Sunny	30.4	0.2	25.8	0.0	Yellowish light gray	None	91	23.9	4.9	1.2	<0.48	<0.60	<0.50
				2012/12/19	Sunny	6.2	0.2	10.3	0.0	Light grayish yellow green	None	>100	34.6	1.9	0.7	<0.58	<0.72	<0.68
				2013/02/12	Cloudy	5.9	0.2	9.3	0.0	Light grayish yellow	None	91	35.9	3.1	2.0	<0.61	<0.73	<0.58
				2012/06/05	Sunny	24.0	1.5	20.7	0.0	Greenish dark gray	None	67	17.1	3.4	2.5	<0.53	<0.50	<0.65
47	Kokaga River	Fumimikibashi Bridge	Tondeshi City	2012/09/12	Sunny	28.6	0.6	28.8	0.0	Light grayish greenish yellow	None	32	26.1	7.5	2.8	<0.63	<0.75	<0.64
				2012/12/19	Sunny	4.1	0.2	7.7	0.0	Dark grayish greenish yellow	None	49	31.5	7.0	5.2	<0.41	<0.48	<0.59
				2013/02/12	Cloudy	4.8	0.5	6.7	0.0	Grayish yellow green	None	74	30.8	6.1	4.4	<0.43	<0.56	<0.63
				2012/06/04	Sunny	28.0	3.5	23.8	0.0	Strong yellow green	None	42	16.5	7.0	3.9	<0.41	<0.61	<0.50
48	Yatagawa River	Maruyamahashi Bridge	Tsukubashi City	2012/09/13	Sunny	29.5	0.7	28.1	0.0	Light grayish yellow	None	49	20.0	10	2.3	<0.53	<0.61	<0.55
				2012/12/20	Sunny	7.1	0.5	3.9	0.0	Dark grayish yellow	None	67	30.7	4.8	3.1	<0.46	<0.71	<0.52
				2013/02/13	Sunny	9.5	1.2	9.0	0.0	Light grayish yellow	None	60	28.8	11	5.5	<0.65	<0.78	<0.56
				2012/06/04	Sunny	28.0	2.0	23.8	0.0	Very dark yellow green	None	34	23.2	9.4	6.1	<0.69	<0.70	<0.66
49	Nishiyangawa River	Sukaimatsuhashi Bridge	Tsukubashi City	2012/12/20	Sunny	8.6	1.0	7.6	0.0	Dark grayish greenish yellow	None	52	32.1	4.1	3.2	<0.52	<0.56	<0.55
				2012/06/04	Sunny	27.0	1.2	24.3	0.0	Yellow greenish black	None	46	20.6	7.5	5.2	<0.55	<0.64	<0.66
				2012/12/21	Sunny	5.8	0.2	6.6	0.0	Yellowish black	None	70	31.4	1.8	1.6	<0.51	<0.56	<0.52
				2012/06/04	Sunny	26.0	1.0	25.2	0.0	Dark grayish yellow green	None	54	20.6	5.7	3.1	<0.47	<0.61	<0.56
50	Inarigawa River	Ogukibashi Bridge	Tsukubashi City	2012/09/12	Sunny	26.2	0.6	25.1	0.0	Light grayish greenish yellow	None	>100	28.1	1.4	0.8	<0.51	<0.61	<0.68
				2012/12/20	Sunny	5.5	0.5	7.6	0.0	Grayish yellow green	None	>100	33.0	1.3	0.7	<0.52	<0.64	<0.53
				2013/02/13	Sunny	8.7	0.5	9.4	0.0	Grayish greenish yellow	None	48	20.7	5.3	4.7	<0.46	<0.72	<0.52

Table 4.4.1.1 Ibaraki Pref. River (Water Quality)

R i v e r s	Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Water quality										Remarks			
	No.	Water Body		Point					Municipality	General items							Radioactive material concentrations (Bq/L)					
		Water Body	Water Body							Water temperature °C	Sampling depth m	Color	Odor	Transparency cm	Electrical conductivity mS/m	SS mg/L	Turbidity	Radioactive iodine I-131		Radioactive cesium Cs-134 Cs-137		
51	T o n e g a w a	T o n e g a w a	Karihashi Bridge	Kogehi City	2012/06/01	Sunny	26.5	1.0	25.0	0.0	Greenish yellowish white	None	68	26.1	9.2	4.1	<0.57	<0.74	<0.60			
					2012/06/22	Light rain	20.0	0.6	19.5	0.0	Light grayish yellow	None	14	19.0	46	14	<0.65	<0.80	<0.54			
					2012/07/20	Cloudy	20.0	0.3	23.0	0.0	Greenish yellowish white	None	48	20.6	5.0	2.7	<0.43	<0.53	<0.63			
					2012/08/24	Sunny	31.7	0.2	31.2	0.0	Grayish yellow green	None	43	27.9	3.2	1.7	<0.61	<0.78	<0.71			
					2012/09/12	Sunny	31.2	0.3	27.2	0.0	Light grayish yellow green	None	39	21.0	14	3.5	<0.48	<0.58	<0.52			
					2012/12/19	Sunny	5.5	0.3	6.4	0.0	Grayish greenish yellow	None	55	36.7	12	4.7	<0.55	<0.67	<0.60			
	52	R i v e r	Tonegawa River	Fukawa	Tonemachi Town	2013/02/13	Sunny	4.2	0.2	5.6	0.0	Grayish yellow	Faint fish and shellfish	63	32.3	6.1	4.2	<0.61	<0.60	<0.70		
						2012/06/04	Sunny	28.0	0.1	24.6	0.0	Dark grayish yellow green	Mud	39	20.2	6.4	3.2	<0.64	<0.78	<0.66		
						2012/09/13	Sunny	30.8	0.2	28.9	0.0	Light grayish yellow	None	41	23.1	24	7.6	<0.57	<0.70	<0.62		
						2012/12/20	Sunny	9.4	0.3	8.1	0.0	Dark grayish yellow green	None	85	29.0	4.3	3.0	<0.55	<0.59	<0.42		
						2013/02/13	Sunny	10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	Unable to collect samples due to construction
						2012/05/31	Cloudy	25.0	0.5	24.0	0.0	Grayish yellow	Earth	21	24.0	31	12	<0.65	<0.73	<0.70		
	53	S y s t e m	Tonegawa River	Sawara	Inashiki City	2012/06/22	Cloudy	22.0	1.2	21.5	0.0	Grayish yellow	None	18	15.4	18	8.9	<0.59	<0.68	<0.62		
						2012/07/19	Sunny	31.6	0.3	28.7	0.0	Grayish yellow	Faint seaweed	30	21.3	8.7	5.9	<0.61	<0.72	<0.76		
						2012/08/20	Sunny	31.3	0.4	31.2	0.0	Grayish yellow	None	22	31.7	11	3.5	<0.48	<0.65	<0.52		
2012/09/14						Sunny	29.7	0.2	29.8	0.0	Light grayish yellow green	None	37	31.2	5.8	2.3	<0.66	<0.92	<0.75			
2012/12/21						Cloudy	7.8	0.4	9.1	0.0	Grayish yellow green	None	46	44.5	7.3	6.0	<0.51	<0.72	<0.65			
2013/02/15						Rain	6.8	0.4	7.3	0.0	Grayish yellow	None	31	40.0	22	13	<0.54	<0.66	<0.59			

Table 4.4.1.2 Ibaraki Pref. River (Sediment)

Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Sediment															Concentration of radioactive material (Bq/kg dried mud)			Remarks
No	Water Body	Point	Municipality					Mud temperature °C	Mud sampling depth cm	Color	Oder	General items								Mud content %	Density g/cm ³	Property	Radioactive iodine I-131	Radioactive cesium		
												Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay	Cs-134					Cs-137		
R i v e r s	T a g a R i v e r	Satonegawa River	Yamagoyahashi Bridge	Kitabaraki City	2012/05/30	Sunny	18.9	0.3	14.7	5	Very dark greenish yellow	None	1.0	15.0	20.8	42.1	13.3	7.9	0.0	94.6	2.891	Sand	<4.6	68	98	
					2012/09/26	Sunny	22.0	1.0	16.2	3	Reddish yellowish black	None	3.6	26.7	50.8	9.8	3.4	5.7	0.0	93.2	2.901	Sand	<3.8	44	77	
					2012/12/10	Sunny	2.5	0.3	6.7	3	Yellowish black	None	24.3	19.4	48.2	5.7	1.0	1.3	0.0	91.1	2.916	Sand	<4.4	58	95	
		2013/03/07	Sunny		10.0	0.3	7.2	3	Yellowish black	None	10.5	31.1	19.7	18.6	5.3	14.7	0.0	89.6	2.873	Gravel	<3.9	35	70			
		2012/05/30	Sunny		20.0	0.6	16.6	3	Dark grayish yellow	None	0.3	3.1	52.9	34.0	5.6	4.1	0.0	95.0	2.748	Sand	<4.5	49	76			
		2012/09/26	Sunny		24.0	1.0	18.6	3	Very dark yellow	None	0.0	0.2	1.0	42.0	37.4	19.3	0.0	79.4	2.729	Sand	<7.4	200	340			
	3	Hanazonogawa River	Kurabeishi	Kitabaraki City	2012/12/10	Sunny	5.0	1.0	6.1	3	Reddish yellowish dark gray	None	0.6	5.1	46.9	37.4	5.0	5.0	0.0	89.1	2.735	Sand	<5.5	66	110	
					2013/02/07	Cloudy	7.7	0.3	6.5	3	Dark grayish reddish yellow	None	0.0	0.0	0.3	46.8	34.2	18.7	0.0	76.7	2.725	Sand	<6.8	160	300	
					2012/05/30	Cloudy	17.0	0.3	14.0	5	Dark grayish reddish yellow	None	4.3	19.2	62.7	10.6	1.5	1.7	0.0	94.8	2.668	Sand	<4.4	41	61	
			2012/09/26		Sunny	23.0	1.0	16.3	3	Grayish reddish yellow	None	9.1	33.6	47.2	7.0	1.7	1.3	0.0	94.0	2.708	Sand	<3.6	19	23		
			2012/12/10		Snow	2.0	0.7	6.0	5	Dark grayish yellow	None	2.9	3.6	54.0	33.4	3.1	3.1	0.0	90.1	2.743	Sand	<4.8	32	56		
			2013/02/07		Sunny	2.5	0.3	3.6	4	Dark grayish reddish yellow	None	1.2	17.9	56.7	16.0	4.7	3.5	0.0	92.8	2.696	Sand	<4.3	22	44		
	4	Isomarebashi Bridge	Kitabaraki City	2012/05/30	Cloudy	18.0	0.2	17.6	5	Dark grayish yellow	None	6.7	28.6	49.5	11.4	2.6	1.1	0.0	95.4	2.683	Sand	<3.9	19	34		
				2012/09/24	Cloudy	22.4	0.2	20.4	5	Dark grayish reddish yellow	None	8.2	12.4	62.1	11.8	3.0	2.5	0.0	88.7	2.649	Sand	<4.4	26	50		
				2012/12/10	Sunny	7.0	0.5	6.4	3	Yellowish dark gray	None	6.5	6.1	57.3	25.2	2.6	2.3	0.0	90.7	2.672	Sand	<4.7	25	43		
				2013/02/08	Sunny	4.0	0.2	3.9	2	Dark grayish reddish yellow	None	9.6	31.9	32.3	18.7	3.2	4.2	0.0	89.3	2.664	Sand	<3.9	18	32		
				2012/05/30	Cloudy	18.1	0.7	13.0	4	Dark grayish reddish yellow	None	3.8	5.9	7.9	86.2	21.1	5.2	0.0	83.9	2.746	Sand	<4.5	40	61		
				2012/09/26	Sunny	21.0	1.3	16.1	5	Grayish yellow red	None	6.0	3.1	14.8	51.9	18.1	6.1	0.0	88.5	2.801	Sand	<4.1	17	33		
	5	Okitagawa River	Sakaibashi Bridge	Takahagi City	2012/12/10	Snow	2.0	1.0	8.1	5	Dark grayish reddish yellow	None	0.6	1.5	4.7	58.9	28.3	6.0	0.0	86.1	2.802	Sand	<4.0	28	59	
					2013/02/07	Cloudy	3.9	0.4	3.7	3	Grayish reddish yellow	None	0.9	13.1	75.8	8.2	1.3	0.7	0.0	93.3	2.739	Sand	<4.0	7.2	14	
					2012/05/30	Cloudy, then sunny	19.4	0.8	16.9	5	Dark grayish reddish yellow	None	1.9	15.4	33.7	35.4	11.1	2.6	0.0	93.5	2.658	Sand	<5.6	42	67	
			2012/09/24		Cloudy	22.0	1.5	19.7	3	Dark yellow	None	1.1	7.0	38.7	47.2	3.6	2.4	0.0	93.8	2.697	Sand	<5.0	39	64		
			2012/12/10		Sunny	7.0	1.0	6.7	3	Yellowish black	Sludge	2.9	18.0	3.9	25.2	33.0	17.0	0.0	82.4	2.672	Sand/silt	<5.6	110	200		
			2013/02/08		Sunny	5.3	0.3	5.6	5	Dark grayish yellow	None	0.5	7.6	58.2	16.9	12.3	4.5	0.0	87.2	2.67	Sand	<5.6	66	120		
	7	Hanamikigawa River	Shinhanamikibashi Bridge	Takahagi City	2012/05/30	Sunny	16.0	0.5	17.6	4	Dark grayish reddish yellow	None	0.0	0.8	2.6	80.6	11.8	4.3	0.0	86.1	2.64	Sand	<6.1	98	150	
					2012/09/26	Sunny	24.0	1.2	20.5	5	Dark grayish reddish yellow	None	2.3	33.3	36.4	23.3	2.8	2.0	0.0	93.3	2.657	Sand	<4.6	29	53	
					2012/12/11	Sunny	8.1	0.6	7.9	5	Very dark yellow	None	1.2	9.5	32.1	53.8	2.7	0.7	0.0	92.8	2.658	Sand	<4.8	29	53	
			2013/02/08		Sunny	3.0	0.2	4.9	5	Dark grayish reddish yellow	None	0.9	7.1	42.0	40.1	5.6	4.2	0.0	91.2	2.666	Sand	<4.3	40	62		
			2012/05/31		Sunny	23.0	0.4	18.5	5	Dark grayish reddish yellow	None	0.0	0.6	9.2	60.4	21.6	8.1	0.0	85.2	2.649	Sand	<4.3	24	38		
			2012/09/27		Cloudy	24.0	1.5	22.1	3	Dark grayish yellow	None	7.7	31.9	46.5	9.7	2.6	1.6	0.0	93.1	2.667	Sand	<3.4	6.5	9.4		
8	K u j i g a w a R i v e r	Yamagata	Hitachiomiyashi City	2012/12/05	Sunny	2.3	1.4	5.1	5	Dark grayish reddish yellow	None	2.8	5.7	86.8	1.6	1.1	2.0	0.0	92.8	2.684	Sand	<3.5	<3.8	10		
				2013/02/07	Cloudy	0.8	1.3	2.4	3	Dark grayish reddish yellow	None	10.2	8.9	2.8	37.3	25.6	15.2	0.0	78.5	2.671	Sand	<5.3	40	71		
				2012/05/31	Sunny	16.0	0.6	19.5	3	Dark grayish reddish yellow	None	22.0	36.4	13.7	15.2	9.3	3.1	0.0	94.7	2.66	Sand	<3.4	<5.2	11		
		2012/06/26		Sunny	24.0	0.7	19.5	5	Very dark reddish yellow	None	25.0	31.6	43.4	0.0	0.0	0.0	0.0	95.4	2.687	Sand	<3.2	<5.4	6.1			
		2012/07/19		Sunny	22.0	0.5	24.3	3	Greenish yellowish white	None	0.0	0.0	0.0	10.2	45.6	44.2	0.0	58.3	2.594	Sand	<6.2	<8.8	<8.5			
		2012/08/20		Sunny	28.1	0.6	27.8	10	Dark grayish yellow	None	2.9	82.6	13.7	0.3	0.2	0.3	0.0	95.5	2.652	Sand	<3.5	8.3	8.5			
9	S a k a i b a s h i B r i d g e	Sakaibashi Bridge	Hitachishi City/ Tokaimura Village	2012/09/11	Sunny	28.2	0.3	22.6	3	Dark grayish yellow	None	0.0	0.1	0.8	47.9	43.5	7.7	0.0	84.8	2.693	Sand	<4.8	61	100		
				2012/12/05	Sunny	9.0	0.6	6.8	3	Dark grayish reddish yellow	None	12.7	20.5	5.6	17.9	22.1	21.3	0.0	70.4	2.403	Sand/silt	<6.3	62	94		
				2013/02/08	Sunny	3.1	0.5	4.2	3	Dark grayish reddish yellow	None	0.0	1.7	0.0	20.4	48.1	29.9	0.0	62.0	2.616	Sand	<7.1	43	92		
		2012/05/31		Cloudy, partly sunny	19.7	1.0	20.6	5	Dark grayish reddish yellow	None	0.3	0.1	5.8	85.0	8.6	0.2	0.0	92.5	2.866	Sand	<4.2	6.5	16			
		2012/09/27		Sunny	23.0	3.5	19.7	5	Yellowish black	Sludge	6.7	0.7	0.0	42.8	39.8	9.9	0.0	83.4	2.723	Sand	<4.9	48	80			
		2012/12/07		Sunny	12.7	2.5	9.2	3	Dark grayish yellow	Sludge	7.0	0.8	1.1	41.7	33.0	16.4	0.0	77.7	2.723	Sand	<5.3	39	77			
2013/02/07	Sunny	10.1	0.5	5.9	3	Dark grayish yellow	None	0.0	0.0	0.4	45.4	40.2	13.9	0.0	77.4	2.675	Sand	<5.6	86	160						
10	N a k a g a w a R i v e r	Noguchi	Hitachiomiyashi City/ Shinsatomachi Town	2012/05/31	Cloudy	21.8	1.0	20.5	4	Dark grayish reddish yellow	None	3.4	20.4	17.4	40.5	14.7	3.7	0.0	91.7	2.719	Sand	<3.4	6	13		
				2012/09/27	Sunny	23.0	2.0	21.1	5	Yellowish black	None	5.7	5.2	1.0	48.7	27.9	11.6	0.0	79.3	2.691	Sand	<5.0	63	100		
				2012/12/05	Sunny	10.0	1.7	9.5	5	Dark grayish reddish yellow	Putescence	4.4	15.2	12.0	30.8	30.4	7.1	0.0	80.4	2.684	Sand	<4.3	34	54		
		2013/02/07		Sunny	8.4	0.4	7.1	2	Dark grayish yellow	None	9.3	35.1	22.1	31.6	1.2	0.8	0.0	94.2	2.697	Sand	<3.7	7.1	13			
		2012/05/31		Cloudy, partly sunny	19.7	1.0	20.6	5	Dark grayish reddish yellow	None	0.3	0.1	5.8	85.0	8.6	0.2	0.0	92.5	2.866	Sand	<4.2	6.5	16			
		2012/09/27		Sunny	23.0	3.5	19.7	5	Yellowish black	Sludge	6.7	0.7	0.0	42.8	39.8	9.9	0.0	83.4	2.723	Sand	<4.9	48	80			
11	S y s t e m	Shimokumi	Mitoshi City	2012/12/07	Sunny	12.7	2.5	9.2	3	Dark grayish yellow	Sludge	7.0	0.8	1.1	41.7	33.0	16.4	0.0	77.7	2.723	Sand	<5.3	39	77		
				2013/02/07	Sunny	10.1	0.5	5.9	3	Dark grayish yellow	None	0.0	0.0	0.4	45.4	40.2	13.9	0.0	77.4	2.675	Sand	<5.6	86	160		

Table 4.4.1.2 Ibaraki Pref. River (Sediment)

Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Sediment														Concentration of radioactive material (Bq/kg dried mud)			Remarks	
No	Water Body	Point	Municipality					Mud temperature °C	Mud sampling depth cm	Color	Odor	General items							Mud content %	Density g/cm ³	Property	Radioactive iodine I-131	Radioactive cesium			
												Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay					Cs-134	Cs-137		
R i v e r s	N a k a g a w a	Nakagawa River	Katsubashi Bridge	Mitoshi City/ Hitachinaka City	2012/05/31	Sunny	17.3	0.5	19.7	5	Dark grayish reddish yellow	None	0.0	0.0	0.0	66.0	30.0	4.0	0.0	84.2	2.699	Sand	-4.2	35	51	
					2012/06/26	Sunny	22.0	6.8	19.7	2	Very dark reddish yellow	None	0.0	0.3	6.7	90.5	2.5	0.0	0.0	91.1	2.733	Sand	<-5.0	12	22	
					2012/07/19	Cloudy	27.0	1.5	25.0	5	Dark yellow	None	0.0	0.9	0.0	23.0	49.7	26.4	0.0	69.8	2.632	Silt	<-8.0	120	210	
					2012/08/20	Sunny	33.0	7.0	26.8	10	Dark gray	Sludge	0.0	0.0	0.0	32.2	54.6	13.2	0.0	79.3	2.657	Sand	<-6.5	66	110	
					2012/09/11	Sunny	28.5	0.4	27.7	3	Reddish yellowish dark gray	Seaweed	0.0	0.3	0.0	28.3	61.1	10.3	0.0	84.1	2.697	Sand	<-5.0	44	70	
					2012/12/07	Sunny	5.8	7.0	14.0	5	Yellowish black	Sludge	8.7	5.5	0.0	2.3	30.5	52.9	0.2	50.0	2.561	Silt	<-14	280	480	
	R i v e r	N a k a m a g a w a	Nakamagawa River	Yanagisawabashi Bridge	Hitachinaka City	2013/02/07	Sunny	7.4	4.5	11.1	5	Reddish yellowish black	Sludge	20.6	21.9	0.4	11.7	15.9	29.3	0.0	69.2	2.61	Silt	<-7.1	120	220
						2012/05/31	Sunny	19.6	1.1	21.2	10	Greenish yellowish black	Faint sewage	0.1	0.7	0.8	49.9	21.7	26.6	0.1	73.2	2.629	Silt	<-9.5	280	410
						2012/09/28	Rain	22.0	1.2	20.6	7	Yellowish black	Sludge	0.0	0.3	0.0	16.6	50.2	32.9	0.0	63.6	2.626	Silt	<-12	460	740
						2012/12/06	Sunny	10.8	2.0	10.1	3	Yellowish black	Seaweed	0.0	1.9	1.3	46.9	35.1	14.8	0.0	74.9	2.677	Silt	<-7.0	190	320
						2013/02/07	Sunny	4.4	1.4	8.3	10	Reddish yellowish black	Putrescence	5.2	1.7	0.0	23.6	44.4	25.2	0.0	62.8	2.575	Silt	<-9.9	310	580
						2012/06/11	Sunny	23.3	0.2	22.8	2	Very dark yellow red	Putrescence	17.7	21.7	0.0	40.8	17.2	2.6	0.0	89.0	2.738	Sand/gravel	<-4.7	58	100
	S y s t e m	H i n u m a g a w a	Hinumagawa River	Takahashi	Ibarkimachi Town	2012/12/06	Sunny	14.7	0.3	11.5	2	Dark grayish yellow red	None	25.8	26.7	36.9	10.3	0.1	0.2	0.0	93.6	2.739	Gravel/sand	<-3.8	40	69
						2012/06/11	Cloudy	23.0	0.8	22.3	3	Very dark reddish yellow	None	0.2	1.0	0.0	24.1	46.6	28.0	0.1	78.5	2.646	Sand/gravel	<-6.7	110	160
						2012/12/07	Sunny	3.1	0.5	6.8	3	Dark grayish yellow red	None	9.7	45.0	23.8	18.9	1.9	0.0	0.0	93.8	2.689	Sand	<-3.6	20	37
						2012/06/12	Cloudy	15.8	0.2	17.2	2	Dark reddish yellow	None	22.2	41.7	25.7	8.2	1.8	0.4	0.0	95.0	2.671	Sand/gravel	<-4.0	35	57
						2012/12/06	Sunny	13.5	0.3	12.1	2	Dark grayish yellow red	None	11.1	48.0	25.9	7.6	5.1	2.2	0.0	88.0	2.673	Sand	<-4.4	52	87
						2012/06/05	Sunny	26.0	1.0	20.6	3	Very dark reddish yellow	None	9.3	30.6	8.1	21.5	18.1	12.4	0.0	90.4	2.636	Sand	<-6.5	250	380
	R i v e r	H i n u m a g a w a	Hinumagawa River	Hinumabashi Bridge	Mitoshi City/ Otaimachi Town	2012/12/06	Sunny	15.3	0.5	11.0	5	Dark grayish reddish yellow	None	11.5	7.9	19.5	49.2	9.7	2.3	0.0	88.8	2.677	Sand	<-4.5	49	94
						2012/06/05	Sunny	26.0	0.3	22.6	3	Reddish yellowish black	Sewage	5.3	21.0	0.3	19.2	27.1	27.1	0.0	73.9	2.611	Mud	<-11	510	750
						2012/09/28	Rain	22.0	2.0	21.1	3	Dark grayish yellow	Sludge	11.0	19.7	43.2	23.0	2.8	0.2	0.0	90.7	2.815	Sand	<-4.2	13	23
						2012/12/06	Sunny	12.4	1.1	11.9	5	Dark grayish yellow	None	1.2	1.2	17.4	25.5	34.4	20.1	0.1	65.8	2.501	Silt	<-7.3	120	210
						2013/02/07	Cloudy	1.8	0.4	8.0	2	Dark grayish reddish yellow	Sewage	10.5	34.0	23.6	16.3	8.0	6.7	0.0	85.1	2.669	Gravel/silt	<-6.7	200	360
						2012/06/06	Light rain	21.0	0.9	18.4	5	Very dark reddish yellow	None	0.1	3.6	55.8	22.5	11.0	7.0	0.0	83.0	2.584	Sand	<-6.4	110	160
	T o n e g a w a	H o k o t a g a w a	Hokotagawa River	Ashibashi Bridge	Hokotashi City	2012/09/26	Sunny	28.0	1.2	19.8	5	Yellow reddish black	Faint sludge	0.0	3.0	7.0	38.4	30.3	21.3	0.0	71.4	2.604	Silt	<-6.4	160	260
2012/12/06						Sunny	14.7	1.5	10.7	5	Dark grayish reddish yellow	Sludge	8.0	1.3	2.4	54.4	22.1	11.8	0.0	68.4	2.601	Silt	<-7.0	130	240	
2013/02/08						Cloudy	2.7	1.2	7.7	5	Yellowish black	None	0.0	3.6	2.1	34.0	36.9	23.3	0.1	66.9	2.576	Silt	<-6.9	130	250	
2012/06/06						Cloudy	20.0	0.8	19.2	5	Dark grayish reddish yellow	None	2.8	22.2	7.9	30.6	13.2	23.1	0.1	79.7	2.613	Sand	<-5.3	90	130	
2012/09/26						Sunny	25.0	0.5	20.1	3	Dark grayish reddish yellow	Sludge	0.0	0.0	0.0	25.9	58.2	15.9	0.0	76.9	2.703	Silt	<-7.9	140	230	
2012/12/06						Sunny	14.4	1.2	11.3	5	Dark grayish reddish yellow	Faint sludge	0.0	1.6	0.0	29.1	50.4	18.8	0.0	59.0	2.645	Silt	<-8.8	190	350	
K i t a u r a	T o n e g a w a	Tomogawa River	Shinomogawabashi Bridge	Hokotashi City	2013/02/08	Cloudy	3.7	0.4	8.6	5	Dark grayish reddish yellow	None	0.0	5.7	38.8	39.7	8.6	7.1	0.0	86.4	2.648	Sand	<-3.4	59	70	
					2012/06/06	Light rain	21.0	0.4	16.7	5	Dark grayish reddish yellow	None	2.7	14.7	33.3	54.8	7.7	1.4	0.1	0.0	95.9	2.634	Sand	<-4.4	38	70
					2012/09/27	Sunny	24.0	0.5	17.9	3	Dark grayish reddish yellow	None	0.0	0.1	8.2	52.8	29.1	9.9	0.0	86.9	2.65	Sand	<-5.7	120	210	
					2012/12/06	Sunny	11.0	0.2	12.7	3	Dark grayish yellow red	None	3.0	7.9	0.0	0.0	10.2	77.4	1.5	92.7	2.668	Sand	<-4.5	61	98	
					2013/02/08	Cloudy	5.0	0.3	9.2	2	Dark grayish yellow	None	0.4	4.4	41.9	49.0	2.2	2.1	0.0	90.0	2.639	Sand	<-4.4	62	110	
					2012/06/06	Light rain	21.0	0.5	17.8	5	Very dark yellow	None	0.0	0.3	0.0	32.6	46.7	20.3	0.0	76.3	2.625	Sand	<-6.3	64	88	
S y s t e m	T a k e d a g a w a	Takedagawa River	Uchijukuhashi Bridge	Namegatsuchi City	2012/09/26	Sunny	25.0	0.7	19.6	3	Yellow reddish white	None	1.3	0.0	0.3	32.8	47.8	17.7	0.0	66.3	2.628	Silt	<-7.6	250	380	
					2012/12/12	Sunny	12.1	0.3	9.7	10	Dark grayish reddish yellow	Faint sewage	0.0	0.0	0.0	60.4	33.0	6.6	0.0	79.0	2.682	Sand	<-7.2	150	230	
					2013/02/08	Sunny	5.0	0.3	8.0	5	Dark grayish reddish yellow	None	0.0	3.2	15.5	65.4	10.9	5.0	0.0	90.3	2.646	Sand	<-6.1	80	150	
					2012/06/06	Cloudy	21.0	0.2	19.4	5	Yellow reddish black	Sewage	1.5	0.9	11.7	39.0	21.1	24.5	1.2	76.7	2.622	Sand	<-6.8	160	230	
					2012/09/27	Sunny	25.0	0.5	19.1	3	Dark grayish reddish yellow	None	0.0	0.0	2.8	86.1	8.4	2.7	0.0	90.4	2.688	Sand	<-5.7	64	110	
					2012/12/12	Sunny	11.4	0.3	8.2	3	Dark grayish reddish yellow	Mud	0.0	0.0	0.4	31.1	44.8	23.7	0.1	60.7	2.581	Mud	<-5.4	12	23	
S y s t e m	Y a m a d a g a w a	Yamadagawa River	Nioyoshihashi Bridge	Namegatsuchi City	2013/02/14	Cloudy	5.3	0.3	5.2	5	Dark grayish reddish yellow	None	0.0	0.5	0.0	50.2	41.6	7.6	0.1	80.0	2.682	Sand/silt	<-4.8	60	130	
					2012/06/06	Sunny	21.0	1.0	21.0	5	Very dark yellow	None	0.0	0.0	5.5	72.4	12.6	9.4	0.0	91.7	2.64	Sand	<-5.6	99	140	
					2012/09/27	Sunny	26.0	0.4	20.4	3	Dark grayish yellow	None	12.1	1.0	6.3	69.6	7.8	3.2	0.0	89.1	2.651	Sand	<-5.0	77	110	
					2012/12/14	Sunny	6.3	0.3	5.6	1	Dark grayish reddish yellow	Faint sewage	20.0	5.7	0.4	26.7	30.5	16.6	0.0	57.6	2.549	Mud	<-8.7	100	190	
					2013/02/14	Cloudy	5.8	0.5	6.1	2	Dark grayish reddish yellow	None	12.3	20.4	3.4	50.7	8.5	4.7	0.0	88.8	2.675	Gravel/sand	<-4.5	63	120	
					2012/06/06	Cloudy	21.0	0.2	20.6	5	Dark grayish reddish yellow	None	0.0	0.1	10.6	84.8	2.3	2.3	0.0	93.1	2.419	Sand	<-5.2	110	150	
S y s t e m	G u n t s u g a w a	Gantsugawa River	JA Yokohashi	Namegatsuchi City	2012/09/27	Cloudy	26.0	0.1	22.4	3	Dark grayish reddish yellow	Faint seaweed	0.3	3.1	33.9	60.3	2.0	0.5	0.0	92.6	2.649	Sand	<-4.9	83	140	
					2012/12/14	Sunny	9.1	0.2	8.7	5	Dark grayish reddish yellow	Faint sewage	0.0	0.1	3.2	66.6	21.9	8.2	0.0	83.2	2.652	Sand/silt	<-5.2	94	170	
					2013/02/14	Cloudy	7.7	0.2	7.2	4	Dark grayish reddish yellow	None	0.0	0.2	12.5	73.3	6.7	7.3	0.0	89.4	2.675	Sand	<-4.6	56	110	

Table 4.4.1.2 Ibaraki Pref. River (Sediment)

Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Sediment														Concentration of radioactive material (Bq/kg dried mud)			Remarks	
No.	Water Body		Point					Municipality	Mud temperature °C	Mud sampling depth cm	Color	Odor	General items							Mud content %	Density g/cm ³	Property	Radioactive iodine I-131	Radioactive cesium		
													Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay					Cs-134		Cs-137
26	Kitanaka Lake	Naguregawa River	Sahobashi Bridge	Kashimashi City	2012/06/07	Sunny	21.0	0.1	18.5	5	Yellowish black	Sewage	0.1	1.4	26.7	44.5	22.4	4.8	0.0	83.3	2.634	Mad	<7.8	340	490	
					2012/09/27	Sunny	25.0	0.1	21.0	3	Yellow reddish black	Sewage	6.8	5.8	1.2	54.7	25.7	5.8	0.0	89.8	2.656	Sand	<6.5	190	300	
					2012/12/12	Sunny	4.6	0.2	7.4	2	Very dark reddish yellow	Faint sewage	2.3	3.9	7.1	59.2	21.8	5.7	0.0	82.4	2.631	Sand	<6.7	220	370	
27	Sonobegawa River	Sonobeshinhashi Bridge	Onitama City	2013/02/15	Rain	10.7	0.2	8.9	2	Reddish yellowish black	Sewage	6.8	8.5	24.3	44.3	12.7	3.0	0.0	85.7	2.712	Sand	<6.0	130	240		
				2012/05/30	Sunny	24.2	2.2	21.3	10	Yellow reddish dark gray	None	2.2	8.7	0.8	43.8	28.0	16.6	0.0	88.0	2.651	Gravel/sand	<5.8	100	160		
				2012/09/26	Sunny	26.0	1.3	19.3	3	Dark grayish reddish yellow	None	0.0	0.0	0.0	6.9	47.8	45.1	0.2	50.4	2.516	Silt	<14	490	880		
				2012/12/10	Sunny	7.0	0.8	7.4	4	Dark grayish reddish yellow	None	1.3	2.1	0.4	32.7	44.5	19.0	0.0	74.3	2.658	Silt	<6.5	100	190		
				2013/02/13	Sunny	11.2	1.3	8.2	3	Dark grayish yellow	Faint sewage	0.0	0.5	0.0	14.6	50.3	34.6	0.0	50.3	2.512	Silt	<12	320	590		
28	Sannogawa River	Tokorobashi Bridge	Onitama City	2012/05/30	Cloudy	24.3	1.2	20.6	5	Reddish yellowish gray	None	0.0	0.2	7.3	80.6	6.0	5.9	0.0	91.3	2.649	Gravel/sand	<11	630	920		
				2012/09/26	Sunny	27.0	1.4	20.4	2	Dark grayish reddish yellow	None	4.0	5.5	10.8	72.4	4.4	2.7	0.0	93.6	2.695	Sand	<7.2	340	560		
				2012/12/10	Sunny	2.0	0.5	7.9	3	Reddish yellowish black	Sludge	10.3	5.1	6.5	42.5	25.1	10.4	0.0	75.3	2.642	Silt	<11	550	960		
				2013/02/13	Sunny	10.7	0.6	8.9	2	Yellow reddish black	Sewage	7.2	7.0	10.1	26.7	39.0	9.9	0.0	73.0	2.613	Sand/silt	<11	520	950		
				2012/05/30	Cloudy	22.8	1.0	19.3	5	Reddish yellowish dark gray	None	0.0	0.0	0.0	13.3	47.3	39.4	0.0	70.0	2.572	Silt/sand	<9.8	330	500		
29	Koisegawa River	Heiwabashi Bridge	Ishikashi City	2012/09/26	Sunny	20.0	0.1	19.1	2	Reddish yellowish black	Faint mud	0.0	0.0	0.0	22.5	50.2	27.3	0.0	62.3	2.613	Silt	<9.1	260	420		
				2012/12/10	Sunny	5.3	0.3	4.7	3	Greenish yellowish black	None	0.0	0.0	0.0	14.8	49.8	35.4	0.0	57.1	2.542	Silt	<9.2	270	500		
				2013/02/13	Sunny	10.7	0.6	7.1	4	Dark grayish yellow	None	0.0	0.0	20.4	47.1	20.7	11.8	0.0	83.2	2.613	Sand/silt	<4.8	70	140		
				2012/05/29	Sunny	24.5	0.7	22.9	8	Dark grayish greenish yellow	None	0.0	0.3	1.2	87.6	8.7	2.2	0.0	92.4	2.686	Sand	<4.3	15	27		
30	Kajinogawa River	Kamishikubashi Bridge	Namegata City	2012/09/26	Sunny	25.0	1.1	20.5	3	Dark grayish reddish yellow	Faint seaweed	0.0	0.3	1.5	64.3	23.6	10.3	0.0	82.6	2.679	Sand	<5.5	77	120		
				2012/12/12	Sunny	8.2	0.3	9.4	8	Dark grayish reddish yellow	None	0.2	3.6	10.5	67.3	11.1	7.3	0.0	84.3	2.654	Sand	<4.7	62	110		
				2013/02/13	Sunny	8.0	0.5	10.4	5	Dark grayish yellow	None	0.0	1.0	25.2	49.2	14.8	9.9	0.0	74.1	2.596	Sand	<5.4	86	140		
31	Hishikigawa River	Hishikibashi Bridge	Kasumigaura City	2012/05/30	Sunny	23.0	1.0	22.5	5	Dark grayish yellow	None	0.0	0.8	4.7	67.1	21.3	6.1	0.0	86.6	2.659	Gravel/sand	<8.6	340	520		
				2012/09/25	Cloudy	21.0	0.3	20.8	3	Dark grayish yellow red	None	0.0	3.9	8.2	52.5	25.9	9.5	0.0	85.6	2.684	Sand	<8.7	260	400		
				2012/12/12	Sunny	6.5	0.2	4.9	4	Dark grayish reddish yellow	None	0.0	1.8	6.6	49.6	26.8	15.2	0.0	82.7	2.683	Sand	<8.0	220	390		
32	Ehinogawa River	Kawanakabashi Bridge	Kasumigaura City	2013/02/13	Sunny	10.7	0.4	8.2	3	Dark grayish yellow	None	0.0	0.4	1.4	61.4	26.1	10.7	0.0	79.8	2.637	Sand	<7.6	220	410		
				2012/05/29	Cloudy	23.9	1.6	24.6	5	Yellowish dark gray	Earth	0.0	0.0	6.2	57.1	25.0	11.5	0.1	80.0	2.661	Silt/sand	<11	370	580		
				2012/09/25	Cloudy	22.0	1.2	21.5	3	Yellow reddish black	Faint seaweed	1.6	25.8	7.8	27.5	22.4	14.8	0.1	86.4	2.679	Sand	<7.0	190	340		
				2012/12/12	Sunny	8.1	1.2	6.9	10	Reddish yellowish black	Sewage	0.0	4.0	16.3	46.4	21.0	12.2	0.0	80.9	2.679	Sand/mud	<8.7	330	590		
33	Sakaigawa River	Sahobashi Bridge/National Route 134	Tsuchinashi City	2013/02/13	Sunny	10.2	1.3	8.8	5	Dark grayish yellow	Faint sludge	0.5	0.5	7.0	53.0	27.6	11.4	0.0	75.7	2.63	Silt	<8.3	260	470		
				2012/05/29	Cloudy	30.0	0.8	25.8	5	Yellow reddish dark gray	Cloudy	9.5	23.5	17.2	42.0	5.0	2.8	0.0	92.8	2.663	Gravel/sand	<7.8	310	470		
				2012/09/25	Cloudy	21.0	0.4	21.7	3	Dark grayish yellow red	None	6.0	23.0	20.5	43.1	4.7	2.6	0.0	93.4	2.697	Sand	<6.7	260	420		
				2012/12/11	Sunny	12.0	0.4	11.6	3	Reddish yellowish black	Faint sludge	8.5	7.0	0.0	0.0	84.3	0.1	66.1	2.576	Clay	<3.6	40	72			
				2013/02/12	Cloudy	4.0	0.4	11.5	4	Reddish yellowish black	Faint sewage	10.2	46.0	21.1	11.9	5.4	5.4	0.1	86.7	2.653	Gravel/sand	<3.9	50	110		
34	Shinkawa River	Shintenbashi Bridge	Tsuchinashi City	2012/05/29	Sunny	28.0	2.2	22.4	3	Greenish yellowish black	Sludge	1.4	3.8	0.3	49.0	23.4	22.1	0.0	76.6	2.62	Silt	<9.0	380	520		
				2012/09/25	Cloudy	22.0	1.9	22.8	5	Greenish yellowish black	Mud	0.0	0.0	2.6	15.2	30.3	50.1	1.8	40.0	2.412	Silt	<26	1500	2500		
				2012/12/11	Sunny	6.8	1.5	7.5	15	Reddish yellowish black	Faint sewage	0.0	1.4	0.0	14.4	38.6	45.4	0.2	42.2	2.502	Silt	<19	810	1400		
				2013/02/12	Cloudy	6.4	1.5	6.2	5	Reddish yellowish black	Faint sewage	0.0	0.0	3.2	14.0	36.6	45.8	0.3	46.9	2.455	Silt	<19	840	1500		
				2012/05/29	Sunny	26.5	1.0	21.6	5	Greenish yellowish dark gray	None	0.0	0.0	0.0	32.7	48.7	18.6	0.0	81.3	2.655	Sand	<4.8	21	41		
35	Sakuragawa River	Eribashi Bridge	Tsuchinashi City/ Tsukubashi City	2012/09/25	Cloudy	22.0	0.5	20.5	3	Greenish yellowish black	Mud	0.0	0.0	0.0	6.8	42.6	50.5	0.1	49.4	2.505	Silt	<11	110	160		
				2012/12/11	Sunny	4.2	0.2	6.6	10	Reddish yellowish black	Faint sewage	0.0	0.0	0.0	10.4	41.8	47.7	0.1	52.7	2.559	Silt	<9.8	73	140		
				2013/02/13	Sunny	8.6	0.5	6.8	4	Dark grayish yellow	Mud	0.0	0.0	0.0	23.8	48.2	28.1	0.0	62.6	2.593	Silt	<7.1	48	80		
				2012/05/30	Sunny	24.0	0.8	22.4	3	Greenish yellowish black	Faint sewage	0.3	1.7	0.0	23.1	58.6	16.2	0.1	71.5	2.565	Silt	<20	1900	2900		
36	Bizengawa River	Bizengawabashi Bridge	Tsuchinashi City	2012/09/25	Cloudy	20.0	0.8	22.0	2	Yellowish black	Faint mud	0.0	0.5	0.0	15.8	45.1	38.2	0.0	66.1	2.62	Silt	<19	1700	2800		
				2012/12/11	Sunny	10.6	0.7	6.9	5	Reddish yellowish black	Sewage	6.7	9.3	0.9	53.7	20.1	9.3	0.0	74.6	2.626	Sand	<16	1000	1800		
				2013/02/12	Cloudy	6.7	1.5	6.1	5	Greenish yellowish black	Sewage	6.8	4.0	3.0	13.8	32.0	39.9	0.4	59.0	2.574	Sand/silt	<15	750	1400		
				2012/05/31	Sunny	22.5	0.8	21.9	5	Very dark reddish yellow	None	1.2	0.2	0.9	68.9	32.3	8.4	0.1	86.4	2.67	Gravel/sand	<10	520	760		
37	Hanamogawa River	Shirwabashi Bridge	Tsuchinashi City	2012/09/25	Cloudy	20.0	1.0	20.5	3	Reddish yellowish black	Faint seaweed	14.9	44.1	31.3	6.8	1.4	1.5	0.0	92.5	2.667	Sand	<7.5	370	630		
				2012/12/11	Sunny	11.2	0.2	8.9	4	Dark grayish yellow	Mud	0.0	3.3	1.1	29.1	38.7	27.6	0.1	68.1	2.648	Mad	<4.6	10	19		
				2013/02/12	Cloudy	6.4	0.4	6.2	3	Reddish yellowish dark gray	Faint sewage	4.1	25.5	38.8	21.9	5.0	4.8	0.0	87.8	2.662	Gravel/sand	<6.2	190	380		
				2012/05/31	Sunny	23.0	0.8	22.3	5	Very dark reddish yellow	None	0.0	0.2	2.2	80.0	11.3	6.3	0.0	87.3	2.653	Sand	<13	830	1300		
38	Seimeigawa River	Katsuhashi Bridge	Animachi Town	2012/09/24	Sunny	23.0	0.5	24.2	2	Reddish yellowish dark gray	Faint sewage	0.0	0.5	3.1	66.4	18.0	11.9	0.0	83.2	2.739	Sand	<13	690	1100		
				2012/12/10	Sunny	8.3	0.4	8.5	2	Reddish yellowish black	Faint sewage	0.0	0.0	0.0	10.0	54.2	35.8	0.0	52.0	2.522	Silt	<22	1500	2600		
				2013/02/12	Cloudy	6.7	0.4	5.7	1	Dark grayish yellow	Faint sewage	0.0	0.0	0.0	13.8	58.8	27.4	0.0	57.3	2.578	Sand/silt	<18	1200	2300		

Table 4.4.1.2 Ibaraki Pref. River (Sediment)

Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Sediment											Concentration of radioactive material (Bq/kg dried mud)			Remarks			
No	Water Body	Point	Municipality					Mud temperature °C	Mud sampling depth cm	Color	Odor	General items							Mud content %	Density g/cm ³	Property		Radioactive iodine I-131	Radioactive cesium	
												Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay						Cs-134	Cs-137
39	Kasumigaura River	Ogogawa River	Okaharabashi Bridge	Ryugasaki City/ Utsukushi City	2012/05/31	Cloudy	24.2	0.4	20.6	5	Yellow reddish dark gray	None	0.0	0.0	2.0	66.0	19.4	12.6	0.0	80.7	2.644	Sand/silt	<7.9	240	380
					2012/09/24	Sunny	24.0	0.2	23.6	3	Yellowish dark gray	None	0.0	0.0	1.0	62.0	29.5	7.6	0.0	83.5	2.691	Sand	<7.9	210	360
		2012/12/10	Sunny	5.0	0.3	6.9	4	Reddish yellowish black	Sewage	0.0	0.2	0.4	41.7	36.6	21.1	0.0	65.9	2.611	Sand	<11	350	630			
		2013/02/12	Cloudy	6.9	0.4	5.9	3	Dark grayish reddish yellow	None	0.0	0.0	0.5	39.2	38.9	21.4	0.0	65.2	2.587	Sand	<12	350	640			
40	Shimotsugawa River	Shintonehashi Bridge	Inashiki City	2012/05/31	Cloudy	25.8	0.6	22.6	5	Yellowish dark gray	Earth	4.1	5.8	0.0	39.8	39.9	10.5	0.0	86.3	2.675	Sand/silt	<5.3	130	200	
				2012/09/24	Cloudy	26.0	1.2	24.8	3	Greenish yellowish black	Sewage	0.6	2.9	0.3	45.2	47.9	3.1	0.0	76.4	2.701	Sand	<6.3	100	170	
				2012/12/14	Sunny	9.3	2.0	6.9	12	Dark grayish yellow	None	0.0	0.1	0.0	39.0	47.4	13.6	0.0	71.0	2.684	Sand/silt	<7.1	150	250	
				2013/02/14	Cloudy	7.7	2.0	6.3	6	Yellow reddish black	None	0.7	1.9	0.0	31.2	45.8	20.4	0.0	64.0	2.638	Sand/silt	<8.2	150	290	
41	Hitatsugawa River	Yonoshogawa River	Horinouchibashi Bridge	Itakoshi City	2012/06/07	Sunny	22.0	0.5	18.5	5	Yellowish dark gray	None	0.0	0.6	0.0	15.6	38.7	45.1	0.0	26.1	2.151	Mud	<21	130	180
					2012/09/13	Sunny	31.4	0.5	25.5	3	Greenish yellowish black	None	12.5	18.2	20.6	21.9	15.7	11.0	0.0	75.6	2.678	Sand	<6.1	120	170
					2012/12/14	Sunny	2.1	0.5	4.1	1	Reddish yellowish black	Faint sewage	17.8	22.2	5.1	15.4	19.8	19.2	0.5	77.4	2.671	Gravel/sand	<5.0	66	130
					2013/02/14	Cloudy	8.9	0.4	7.4	3	Dark grayish reddish yellow	None	0.0	3.6	9.9	27.3	33.9	25.1	0.3	66.3	2.678	Gravel/sand	<6.3	72	150
42	Ritveter River	Mackawa River	Ayamehashi Bridge	Itakoshi City	2012/06/07	Sunny	22.0	3.0	22.2	5	Very dark yellow green	None	0.0	0.1	0.0	22.5	50.6	26.8	0.0	63.6	2.586	Mud	<8.5	220	360
					2012/09/13	Sunny	33.2	2.0	26.9	10	Yellowish dark gray	Sludge	0.0	0.6	0.0	24.0	52.1	23.4	0.0	67.0	2.616	Mud	<7.3	180	290
					2012/12/14	Sunny	4.0	2.5	7.8	8	Dark grayish greenish yellow	None	0.0	0.0	0.4	33.5	46.9	19.2	0.0	62.3	2.63	Silt	<8.5	180	320
					2013/02/15	Cloudy	8.3	2.5	6.1	5	Reddish yellowish dark gray	None	0.0	0.6	0.0	25.1	49.1	25.3	0.0	67.7	2.62	Silt	<8.8	200	380
43	Tonogawa River	Kawashimabashi Bridge	Kinugawa River	Chikuseshi City	2012/06/05	Sunny	25.0	1.0	21.1	5	Very dark reddish yellow	None	4.8	5.1	2.6	64.5	17.7	5.3	0.0	89.1	2.733	Sand	<4.6	13	19
					2012/09/12	Sunny	28.9	0.7	25.1	3	Dark grayish yellow	None	4.9	12.1	27.4	38.5	11.0	6.1	0.0	89.9	2.698	Sand	<4.1	<5.7	6.4
					2012/12/19	Sunny	6.2	0.5	13.2	3	Dark grayish reddish yellow	None	6.2	16.6	10.2	46.3	18.4	2.2	0.0	89.4	2.736	Gravel/sand	<4.5	<7.3	7.8
					2013/02/12	Cloudy	3.3	0.7	12.3	4	Dark grayish reddish yellow	Faint mud	1.6	3.2	4.7	44.0	30.7	15.0	0.0	82.5	2.727	Sand	<3.6	7.9	14
44	Kinugawa River	Takishitabashi Bridge	Kinugawa River	Moriyashi City	2012/06/01	Cloudy	23.2	0.5	20.3	10	Reddish yellowish dark gray	None	0.0	0.0	9.6	40.0	40.5	9.9	0.0	85.1	2.709	Sand	<4.4	36	64
					2012/06/22	Light rain	26.0	1.0	19.4	5	Reddish yellowish dark gray	None	0.0	0.0	3.7	70.2	23.1	3.1	0.0	88.4	2.744	Sand	<4.7	14	26
					2012/07/20	Cloudy	22.0	1.5	23.9	3	Very dark greenish yellow	None	0.0	0.0	0.0	15.4	61.0	23.7	0.0	76.9	2.693	Sand	<4.6	41	78
					2012/08/24	Sunny	34.3	3.0	29.0	3	Yellowish dark gray	None	2.9	4.5	61.2	30.2	0.8	0.4	0.0	92.1	2.648	Sand	<4.3	8.5	11
45	System River	Tagawa River	Tagawabashi Bridge	Chikuseshi City	2012/09/13	Sunny	28.2	0.2	26.5	3	Dark grayish greenish yellow	None	0.0	0.2	0.0	29.1	45.2	25.6	0.0	74.4	2.645	Sand	<5.4	76	120
					2012/12/20	Sunny	5.9	0.3	7.5	10	Dark grayish yellow	None	0.0	1.4	0.0	9.6	44.6	44.4	0.0	53.9	2.54	Silt	<9.0	140	240
					2013/02/13	Sunny	7.7	0.5	7.4	3	Dark grayish greenish yellow	Mud	0.0	1.5	0.0	9.5	12.8	75.7	0.1	59.3	2.624	Sand/silt	<7.9	99	190
					2012/06/05	Sunny	24.0	10.0	21.5	5	Dark grayish reddish yellow	None	11.5	37.7	44.5	5.6	0.7	0.0	0.0	94.8	2.696	Sand	<3.7	<6.2	10
46	Kokaga River	Kurokobashi Bridge	Kokaga River	Chikuseshi City	2012/09/12	Sunny	30.4	0.2	25.9	5	Yellow reddish black	None	22.3	15.6	23.6	20.8	11.0	6.7	0.0	83.2	2.691	Sand	<4.6	52	94
					2012/12/19	Sunny	6.2	0.2	9.4	2	Dark grayish reddish yellow	Faint mud	8.3	25.8	22.9	33.3	4.2	5.5	0.0	92.1	2.682	Gravel/sand	<3.7	6.5	24
					2013/02/12	Cloudy	5.9	0.2	8.4	2	Dark grayish reddish yellow	Seaweed	8.1	18.4	0.0	0.0	32.8	40.7	0.0	84.1	2.734	Sand/gravel	<3.6	16	38
					2012/06/05	Sunny	24.0	1.5	21.1	5	Very dark greenish yellow	None	0.0	0.2	0.0	43.3	35.7	20.9	0.0	74.0	2.653	Sand	<6.3	83	130
47	Kokaga River	Fumimakibashi Bridge	Fumimakibashi Bridge	Torideshi City	2012/09/12	Sunny	28.6	0.6	28.8	3	Reddish yellowish dark gray	None	4.8	26.3	0.3	35.5	22.7	10.4	0.0	83.6	2.708	Sand	<6.4	99	170
					2012/12/19	Sunny	4.1	0.2	7.6	3	Dark grayish yellow green	None	0.8	3.4	3.9	52.1	27.3	12.4	0.0	74.7	2.681	Sand	<5.4	53	100
					2013/02/12	Cloudy	4.8	0.5	6.7	3	Reddish yellowish black	Sludge	5.2	4.5	10.4	25.3	34.4	20.3	0.0	62.1	2.628	Sand/silt	<7.3	92	170
					2012/06/04	Sunny	28.0	3.5	30.0	5	Very dark yellow	None	0.0	0.0	30.4	68.8	0.8	0.0	0.0	92.5	2.73	Sand	<5.6	28	40
48	Yatagawa River	Maruyamabashi Bridge	Yatagawa River	Torideshi City	2012/09/13	Sunny	29.5	0.7	28.0	3	Yellowish dark gray	None	2.4	0.3	1.1	21.8	26.8	45.8	1.7	58.6	2.595	Silt	<8.0	130	220
					2012/12/20	Sunny	7.1	0.5	2.9	10	Dark grayish reddish yellow	None	1.1	1.6	29.7	39.9	13.8	13.8	0.0	78.8	2.642	Sand	<4.6	37	75
					2013/02/13	Sunny	9.5	1.2	7.5	4	Dark grayish reddish yellow	Faint seaweed	0.0	0.0	17.2	76.5	3.3	2.9	0.0	86.4	2.693	Sand	<4.2	25	50
					2012/06/04	Sunny	28.0	2.0	23.4	10	Yellowish black	Sewage	0.0	0.0	0.0	4.3	30.2	63.5	2.0	45.1	2.456	Mud	<1.7	700	1100
49	Nishiyatagawa River	Sakaimatsuhashi Bridge	Nishiyatagawa River	Torideshi City	2012/12/20	Sunny	8.6	1.0	7.4	13	Greenish black	None	0.0	0.3	0.0	9.9	60.5	29.3	0.0	62.7	2.6	Silt	<9.8	300	540
					2012/06/04	Sunny	27.0	1.2	25.0	5	Reddish yellowish black	None	0.0	0.0	0.0	12.2	53.8	33.8	0.2	65.0	2.526	Sand	<11	400	600
					2012/12/21	Sunny	5.8	0.2	4.5	3	Grayish greenish yellow	None	0.0	2.2	0.0	13.5	14.4	69.9	0.0	48.4	2.477	Clay	<14	250	500
					2012/06/04	Sunny	26.0	1.0	21.7	10	Greenish yellowish dark gray	None	6.4	25.3	0.3	32.0	18.2	17.7	0.0	82.1	2.666	Sand	<11	660	950
50	Inarigawa River	Ogukibashi Bridge	Inarigawa River	Torideshi City	2012/09/12	Sunny	26.2	0.6	24.0	10	Dark grayish reddish yellow	None	5.8	16.7	3.6	46.8	17.0	10.0	0.0	83.3	2.689	Sand	<11	570	900
					2012/12/20	Sunny	5.5	0.5	6.8	6	Dark grayish yellow	Faint sludge	2.9	7.6	4.0	50.7	22.7	12.2	0.0	75.6	2.664	Sand	<11	580	1000
					2013/02/13	Sunny	8.7	0.5	9.2	3	Dark grayish reddish yellow	None	11.3	14.8	4.8	36.1	19.4	13.6	0.0	80.3	2.66	Gravel/sand	<9.6	440	810

Table 4.4.1.2 Ibaraki Pref. River (Sediment)

Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Sediment													Concentration of radioactive material (Bq/kg dried mud)			Remarks				
No.	Water Body		Point					Municipality	Mud temperature	Mud sampling depth cm	Color	Odor	General items							Mud content %	Density g/cm ³	Property	Radioactive iodine I-131		Radioactive cesium			
													Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay						Cs-134	Cs-137		
R i v e r s	51	T o n e g a w a	T o n e g a w a	Kuribashi Bridge	Kogashi City	2012/06/01	Sunny	26.5	1.0	25.0	10	Very dark yellow	None	0.1	1.1	35.9	49.7	8.9	4.3	0.0	90.3	2.668	Sand	<3.8	22	30		
						2012/06/22	Light rain	20.0	0.6	20.0	4	Dark grayish reddish yellow	None	0.6	0.2	0.5	35.2	42.1	21.4	0.0	82.7	2.717	Sand/silt	<4.4	19	29		
						2012/07/20	Cloudy	20.0	0.3	22.5	5	Dark yellow green	None	4.1	1.0	7.6	73.1	7.9	6.3	0.0	87.3	2.715	Sand	<3.8	16	26		
						2012/08/24	Sunny	31.7	0.2	26.7	8	Reddish yellowish dark gray	None	2.0	1.9	37.1	56.4	2.6	0.0	91.9	2.713	Sand	<4.0	8.3	18			
						2012/09/12	Sunny	31.2	0.3	26.8	3	Dark grayish yellow green	None	0.0	0.1	0.5	57.8	31.2	10.5	0.0	85.5	2.811	Sand	<4.9	44	79		
						2012/12/19	Sunny	5.5	0.3	5.2	5	Grayish yellow	None	0.0	0.1	4.0	67.2	27.3	1.5	0.0	88.2	2.859	Sand	<3.9	14	25		
	2013/02/13	Sunny	4.2	0.2	4.8	4	Yellowish dark gray	Faint sludge	0.0	0.0	28.9	55.5	15.5	0.1	0.0	86.8	2.888	Sand	<3.9	9	22							
	2012/06/04	Sunny	28.0	0.1	23.4	10	Very dark greenish yellow	Mud	0.0	0.0	0.0	10.1	45.2	44.3	0.5	63.7	2.659	Mad	<8.7	130	190							
	2012/09/13	Sunny	30.8	0.2	29.4	3	Dark grayish greenish yellow	Faint sludge	0.0	0.0	0.0	49.1	45.8	5.1	0.0	85.4	2.844	Sand	<4.5	33	62							
	2012/12/20	Sunny	9.4	0.3	7.5	3	Reddish yellowish dark gray	None	0.0	0.0	1.2	49.0	40.3	9.5	0.0	80.4	2.733	Sand	<4.5	41	81							
	2013/02/13	Sunny	10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Unable to collect mud due to construction		
	53	S y s t e m	T o n e g a w a	T o n e g a w a	Sawara	Ishikishi City	2012/05/31	Cloudy	25.0	0.5	23.7	4	Yellow reddish dark gray	None	8.9	19.2	0.0	43.2	27.3	1.5	0.0	92.1	2.688	Gravel/sand	<5.8	75	120	
							2012/06/22	Cloudy	22.0	1.2	21.2	5	Yellow reddish black	Putrescence	6.5	19.2	52.0	21.9	0.4	0.0	94.3	2.726	Sand	<4.6	82	120		
							2012/07/19	Sunny	31.6	0.3	28.2	2	Very dark reddish yellow	Faint seaweed	8.9	18.6	48.8	23.2	0.5	0.0	93.9	2.714	Sand	<4.0	71	110		
							2012/08/20	Sunny	31.5	0.4	30.5	5	Yellow reddish black	Sludge	12.7	18.7	5.5	47.6	13.4	2.0	0.0	94.3	2.753	Sand/gravel	<3.8	12	27	
							2012/09/14	Sunny	29.7	0.2	28.8	3	Yellowish dark gray	None	9.7	16.3	25.2	45.0	3.7	0.2	0.0	93.1	2.693	Sand	<4.2	50	90	
							2012/12/21	Cloudy	7.8	0.4	7.8	4	Reddish yellowish dark gray	None	3.9	30.5	42.0	23.3	0.0	0.0	94.5	2.674	Sand	<4.4	47	86		
	2013/02/15	Rain	6.8	0.4	7.1	4	Dark grayish yellow	None	0.0	0.9	0.0	14.3	44.3	40.5	0.0	65.9	2.648	Sand/silt	<6.9	86	170							

Table 4.4.1.3 Ibaraki Pref. River (Surrounding Environment)

Sampling point				Sampling date	Weather	Air temperature °C	Surrounding Environment (Soil and Air Dose)													Remarks			
							Left bank						Right bank						Air dose µSv/h				
							Soil			Soil			Soil			Soil							
No.	Water Body	Point	Municipality	General items			Radioactive material concentrations (Bq/kg (dry))			Air dose µSv/h	General items			Radioactive material concentrations (Bq/kg (dry))									
				Color	Odor	Property	Radioactive iodines I-131	Radioactive cesium Cs-134 Cs-137			Color	Odor	Property	Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137								
R i v e r S y s t e m R i v e r s	S a t o n e g a w a R i v e r	Yamagoyabashi Bridge	Kitabarakiishi City	2012/05/30	Sunny	18.9	Very dark greenish yellow	None	Loamy	<-14	720	1,100	0.39	Very dark greenish yellow	None	Loamy	<-16	1,100	1,700	0.34			
				2012/09/26	Sunny	22.0	Very dark greenish yellow	Earth	Loamy	<-12	770	1,200	0.25	Very dark greenish yellow	Earth	Sandy	<-8.1	440	750	0.25			
				2012/12/10	Sunny	2.5	Very dark yellow red	Earth	Loamy	<-17	1,300	2,200	0.36	Very dark yellow red	Earth	Loamy	<-9.9	430	750	0.33			
				2013/03/07	Sunny	10.0	Very dark reddish yellow	Earth	Loamy/skeletal	<-16	1,100	2,000	0.25	Very dark reddish yellow	Earth	Loamy	<-12	680	1,200	0.25			
				2012/05/30	Sunny	20.0	Very dark yellow	None	Loamy	<-11	420	640	0.18	Very dark reddish yellow	None	Loamy	<-6.6	200	290	0.17			
				2012/09/26	Sunny	24.0	Very dark yellow	Earth	Loamy	<-8.2	210	360	0.15	Very dark yellow red	Earth	Loamy	<-22	2,000	3,200	0.15			
		M u r a y a b a s h i B r i d g e	Murayabashi Bridge	Kitabarakiishi City	2012/12/10	Sunny	5.0	Very dark yellow red	Earth	Loamy	<-9.9	390	660	0.14	Very dark yellow red	Earth	Loamy	<-9.0	220	400	0.15		
					2013/02/07	Cloudy	7.7	Very dark yellow red	Earth	Loamy	<-14	710	1,300	0.15	Very dark yellow red	Earth	Loamy	<-16	1,000	1,900	0.17		
					2012/05/30	Cloudy	17.0	Very dark yellow	None	Loamy	<-9.8	270	430	0.18	Very dark reddish yellow	None	Loamy	<-7.2	160	260	0.18		
					2012/09/26	Sunny	23.0	Very dark yellow	Earth	Loamy	<-6.5	150	240	0.14	Very dark reddish yellow	Earth	Loamy	<-23	1,900	3,100	0.16		
					2012/12/10	Snow	2.0	Dark reddish yellow	Earth	Loamy	<-5.2	65	120	0.17	Very dark reddish yellow	Earth	Loamy	<-6.9	92	160	0.14		
					2013/02/07	Sunny	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	H a n a z o n o g a w a R i v e r	Isonarebashi Bridge	Kitabarakiishi City	2012/05/30	Cloudy	18.0	Very dark yellow	None	Loamy	<-20	1,100	1,500	0.22	Very dark reddish yellow	None	Loamy	<-20	1,400	2,000	0.25			
				2012/09/24	Cloudy	22.4	Dark yellow red	Earth	Loamy	<-17	860	1,300	0.20	Very dark yellow red	Earth	Loamy	<-15	750	1,200	0.22			
				2012/12/10	Sunny	7.0	Very dark reddish yellow	Earth	Loamy	<-14	660	1,100	0.23	Very dark reddish yellow	Earth	Loamy	<-13	800	1,400	0.23			
				2013/02/08	Sunny	4.0	Very dark reddish yellow	Faint earth	Loamy	<-6.5	140	280	0.13	Very dark reddish yellow	Faint earth	Loamy	<-9.8	400	740	0.14			
				2012/05/30	Cloudy	18.1	Grayish greenish yellow	None	Sandy	<-5.0	35	33	0.09	Grayish greenish yellow	None	Sandy	<-5.1	67	110	0.10			
				2012/09/26	Sunny	21.0	Dark yellow	Earth	Sandy	<-4.1	38	60	0.11	Very dark reddish yellow	Earth	Loamy	<-8.0	210	330	0.08			
	O k i t a g a w a R i v e r	Sakaebashi Bridge	Takahagishi City	2012/12/10	Snow	2.0	Dark yellow red	Faint earth	Sandy	<-8.5	110	220	0.12	Dark yellow red	Earth	Loamy	<-6.3	120	200	0.08			
				2013/02/07	Cloudy	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Left bank) Unable to collect samples due to snow on the ground
				2012/05/30	Cloudy, then sunny	19.4	Very dark reddish yellow	None	Loamy	<-14	500	790	0.19	Very dark reddish yellow	None	Loamy	<-13	530	860	0.22			
				2012/09/24	Cloudy	22.0	Very dark yellow green	Earth	Loamy	<-12	420	720	0.17	Very dark yellow green	Earth	Loamy	<-14	510	1,300	0.17			
				2012/12/10	Sunny	7.0	Very dark reddish yellow	Earth	Loamy	<-14	490	810	0.17	Very dark reddish yellow	Earth	Loamy	<-16	880	1,500	0.17			
				2013/02/08	Sunny	5.3	Very dark reddish yellow	Faint earth	Loamy	<-9.7	460	820	0.15	Very dark reddish yellow	Faint earth	Loamy	<-7.5	200	390	0.16			
H a n a z o n o g a w a R i v e r		Shinhanamikubashi Bridge	Takahagishi City	2012/05/30	Sunny	16.0	Dark grayish reddish yellow	None	Sandy	<-7.1	120	180	0.18	Very dark reddish yellow	None	Loamy	<-20	1,200	1,800	0.22			
				2012/09/26	Sunny	24.0	Very dark yellow red	Earth	Loamy	<-12	380	590	0.13	Very dark yellow red	Earth	Loamy	<-15	860	1,400	0.15			
				2012/12/11	Sunny	8.1	Dark reddish yellow	Faint earth	Sandy	<-6.9	120	210	0.16	Very dark yellow red	Faint earth	Loamy	<-20	510	1,400	0.19			
				2013/02/08	Sunny	3.0	Very dark reddish yellow	Earth	Loamy	<-8.3	230	410	0.16	Very dark reddish yellow	Earth	Loamy	<-8.6	320	610	0.15			
				2012/05/31	Sunny	23.0	Very dark reddish yellow	None	Loamy	<-6.1	80	120	0.13	Dark grayish reddish yellow	None	Sandy	<-4.5	17	26	0.10			
				2012/09/27	Cloudy	24.0	Dark reddish yellow	Earth	Loamy	<-6.5	130	200	0.13	Very dark reddish yellow	Earth	Loamy	<-6.7	89	140	0.12			
K u j i g a w a R i v e r	Yamagata	Hitachiomiyashi City	2012/12/05	Sunny	2.3	Dark yellow red	Earth	Loamy/sandy	<-7.2	93	160	0.12	Dark reddish yellow	Earth	Sandy/skeletal	<-3.6	9.6	17	0.10				
			2013/02/07	Cloudy	0.8	Very dark reddish yellow	Earth	Loamy	<-6.1	72	140	0.11	Very dark reddish yellow	Faint earth	Sandy/skeletal	<-4.3	18	38	0.09				
			2012/05/31	Sunny	16.0	Very dark yellow	None	Sandy	<-4.5	48	74	0.10	Very dark reddish yellow	None	Loamy	<-8.9	280	420	0.13				
			2012/06/26	Sunny	24.0	Very dark yellow red	Grass	Sandy	<-6.1	77	130	0.11	Very dark reddish yellow	Grass	Loamy	<-8.8	250	350	0.13				
			2012/07/19	Sunny	22.0	Dull yellow	None	Sandy	<-9.0	230	340	0.10	Very dark reddish yellow	None	Sandy	<-7.1	230	340	0.12				
			2012/08/20	Sunny	28.1	Dark reddish yellow	Faint earth	Loamy	<-6.6	90	140	0.12	Dull reddish yellow	Earth	Loamy	<-12	420	660	0.13				
	S a k a e b a s h i B r i d g e	Sakaebashi Bridge	Hitachi City/ Tokimura Village	2012/09/11	Sunny	28.2	Dull reddish yellow	Earth	Loamy	<-7.5	120	190	0.10	Dull yellow red	Earth	Loamy	<-8.0	230	370	0.12			
				2012/12/05	Sunny	9.0	Very dark reddish yellow	Faint earth	Loamy/sandy	<-7.7	180	330	0.10	Very dark reddish yellow	Earth	Loamy	<-7.2	180	300	0.13			
				2013/02/08	Sunny	3.1	Very dark reddish yellow	Earth	Loamy/sandy	<-6.0	81	140	0.11	Very dark reddish yellow	Earth	Loamy	<-11	340	590	0.12			
				2012/05/31	Cloudy	21.8	Very dark reddish yellow	None	Loamy	<-8.9	260	400	0.10	Dark grayish yellow	None	Loamy	<-6.0	68	110	0.09			
				2012/09/27	Sunny	23.0	Dark reddish yellow	Earth	Sandy	<-6.0	47	77	0.09	Dark yellow	Earth	Sandy	<-4.8	41	73	0.10			
				2012/12/05	Sunny	10.0	Very dark yellow red	Earth	Loamy	<-7.1	150	290	0.12	Dull reddish yellow	Earth	Loamy	<-6.1	90	150	0.09			
N a g a w a R i v e r	Nogachi	Hitachiomiyashi City/ Shinosatomachi Town	2013/02/07	Sunny	8.4	Very dark reddish yellow	Earth	Loamy	<-8.5	230	400	0.10	Very dark reddish yellow	Faint earth	Loamy/clayish	<-7.6	130	230	0.13				
			2012/05/31	Cloudy, partly sunny	19.7	Very dark reddish yellow	None	Loamy	<-11	350	510	0.12	Very dark reddish yellow	None	Clayish	<-13	510	730	0.19				
			2012/09/27	Sunny	23.0	Very dark yellow red	Earth	Loamy	<-9.5	340	560	0.11	Very dark yellow red	Earth	Loamy	<-7.7	150	270	0.11				
			2012/12/07	Sunny	12.7	Very dark yellow red	Faint earth	Loamy	<-5.7	36	80	0.10	Very dark yellow red	Faint earth	Loamy	<-9.9	290	490	0.14				
			2013/02/07	Sunny	10.1	Very dark reddish yellow	Earth	Loamy	<-7.3	130	230	0.09	Very dark reddish yellow	Earth	Loamy/clayish	<-12	290	540	0.13				

Table 4.4.1.3 Ibaraki Pref. River (Surrounding Environment)

Sampling point				Sampling date	Weather	Air temperature °C	Surrounding Environment (Soil and Air Dose)											Remarks										
							Left bank					Right bank																
							Soil			Air dose µSv/h		Soil			Air dose µSv/h													
No.	Water Body	Point	Municipality	General items			Radioactive material concentrations (Bq/kg (dry))		Color	Odor	Property	Radioactive material concentrations (Bq/kg (dry))			Color	Odor	Property	Radioactive material concentrations (Bq/kg (dry))										
				Color	Odor	Property	Radioactive iodines I-131	Radioactive cesium Cs-134 Cs-137				Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137	Radioactive iodine I-131				Radioactive cesium Cs-134 Cs-137										
R i v e r s	N a k a g a w a R i v e r	Nakagawa River	Katsutabashi Bridge	Mitsoshi City/ Hitachinaka City	2012/05/31	Sunny	17.3	Very dark yellow	None	Loamy		<6.9	130	220	0.10	Very dark yellow	None	Clayish		<6.8	120	190	0.11					
					2012/06/26	Sunny	22.0	Dark reddish yellow	Grass	Loamy		<7.9	260	370	0.11	Very dark yellow red	Earth	Loamy		<7.0	120	190	0.11					
					2012/07/19	Cloudy	27.0	Very dark yellow red	Earth	Loamy		<6.9	220	300	0.12	Dark yellow red	Earth	Loamy		<12	350	580	0.12					
					2012/08/20	Sunny	33.0	Dark reddish yellow	Faint earth	Loamy		<9.9	300	480	0.11	Dull reddish yellow	Faint earth	Loamy		<11	490	800	0.11					
					2012/09/11	Sunny	28.5	Dark yellow	Faint earth	Loamy		<25	3,200	5,100	0.16	Dull reddish yellow	Earth	Loamy		<7.4	210	360	0.12					
					2012/12/07	Sunny	5.8	Very dark reddish yellow	Earth	Loamy		<5.7	92	160	0.09	Very dark yellow red	Faint earth	Loamy		<5.2	54	85	0.11					
	N a k a m a r a g a w a R i v e r	Nakamaru River	Yanagisawabashi Bridge	Hitachinaka City	2013/02/07	Sunny	7.4	Very dark reddish yellow	Earth	Loamy		<5.7	110	200	0.09	Very dark reddish yellow	Earth	Loamy/skeletal		<6.5	160	310	0.08					
					2012/05/31	Sunny	19.6	Very dark yellow	None	Loamy		<8.1	150	230	0.13	Very dark reddish yellow	None	Loamy		<13	770	1,200	0.12					
					2012/09/28	Rain	22.0	Very dark reddish yellow	Earth	Loamy		<8.5	160	260	0.11	Very dark reddish yellow	Earth	Loamy		<8.2	350	540	0.12					
					2012/12/06	Sunny	10.8	Dark reddish yellow	Earth	Loamy		<7.5	180	320	0.12	Dull reddish yellow	Earth	Loamy		<6.4	240	400	0.12					
					2013/02/07	Sunny	4.4	Very dark yellow	Earth	Loamy		<9.7	290	550	0.10	Very dark yellow	Earth	Loamy		<4.7	51	93	0.12					
					2012/06/11	Sunny	23.3	Very dark yellow red	Grass	Loamy		<3.0	22	38	0.08	Very dark reddish yellow	Earth	Loamy		<8.5	240	340	0.10					
	H i t a c h i n a k a C i t y	Hitanuma River	Nagaokabashi Bridge	Ibaraki City	2012/12/06	Sunny	14.7	Very dark yellow red	Faint earth	Loamy/skeletal		<4.6	28	43	0.09	Very dark reddish yellow	Faint earth	Loamy/skeletal		<8.4	280	480	0.13					
					2012/06/11	Cloudy	23.0	Very dark yellow red	Earth	Loamy		<9.5	220	350	0.11	Very dark reddish yellow	Earth	Loamy		<10	300	460	0.11					
					2012/12/07	Sunny	3.1	Very dark reddish yellow	Faint earth	Loamy		<8.0	89	170	0.12	Very dark reddish yellow	Faint earth	Loamy		<6.8	75	110	0.10					
					2012/06/12	Cloudy	15.8	Very dark reddish yellow	Grass	Loamy		<7.5	160	230	0.11	Very dark reddish yellow	Grass	Loamy		<12	320	470	0.13					
	S y s t e m R i v e r	Kameigawa River	Kameibashi Bridge	Ibaraki City	2012/12/06	Sunny	13.5	Very dark reddish yellow	Earth	Loamy		<11	330	580	0.11	Dark yellow red	Earth	Loamy		<13	480	860	0.14					
					2012/06/05	Sunny	26.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(Left bank) Soil not exposed (Right bank) Unable to collect samples due to private property		
	2012/12/06	Sunny	15.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	R i v e r s	Hitanuma River	Himabashi Bridge	Oaraimachi Town	2012/06/05	Sunny	26.0	Very dark yellow red	Earth	Loamy		<19	1,400	2,100	0.20	Very dark yellow red	Earth	Loamy		<14	1,100	1,700	0.15					
					2012/09/28	Rain	22.0	Greenish yellowish black	Earth	Loamy		<8.7	140	240	0.11	Greenish yellowish black	Earth	Loamy		<5.7	190	310	0.11					
					2012/12/06	Sunny	12.4	Very dark reddish yellow	Earth	Loamy		<14	450	820	0.14	Dark reddish yellow	Faint earth	Loamy		<11	410	730	0.15					
					2013/02/07	Cloudy	1.8	Yellow reddish black	Earth	Loamy		<14	570	1,100	0.17	Very dark reddish yellow	Putrescence	Loamy/skeletal		<9.4	410	760	0.14					
					2012/06/06	Light rain	21.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T o m o g a w a R i v e r	Hokotagawa River	Asahibashi Bridge	Hokotashi City	2012/09/26	Sunny	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Soil not exposed			
				2012/12/06	Sunny	14.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
				2013/02/08	Cloudy	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				2012/06/06	Cloudy	20.0	Very dark reddish yellow	Earth	Loamy		<11	240	360	0.12	Very dark reddish yellow	Earth	Loamy		<11	290	430	0.16						
				2012/09/26	Sunny	25.0	Very dark reddish yellow	Faint earth	Loamy		<8.5	260	440	0.11	Very dark yellow red	Faint earth	Loamy		<7.8	220	350	0.11						
K i t a w a R i v e r	Tomogawa River	Shinomogawabashi Bridge	Hokotashi City	2012/12/06	Sunny	14.4	Very dark reddish yellow	Faint earth	Loamy		<8.4	130	250	0.13	Dark reddish yellow	Faint earth	Loamy		<7.2	69	120	0.13						
				2013/02/08	Cloudy	3.7	Very dark reddish yellow	Earth	Loamy		<6.3	130	260	0.11	Very dark yellow red	Earth	Loamy		<12	460	830	0.13						
				2012/06/06	Light rain	21.0	Dark grayish yellow red	Earth	Loamy		<9.8	370	560	0.12	Very dark reddish yellow	Earth	Loamy		<8.8	320	490	0.12						
				2012/09/27	Sunny	24.0	Very dark reddish yellow	Earth	Loamy		<9.2	280	490	0.11	Very dark reddish yellow	Earth	Loamy		<6.1	160	260	0.11						
				2012/12/06	Sunny	11.0	Very dark reddish yellow	Faint earth	Loamy		<4.8	40	85	0.12	Very dark reddish yellow	Faint earth	Loamy		<6.1	71	100	0.11						
L a k e S y s t e m	Tajogawa River	Tazukabashi Bridge	Namegata City	2013/02/08	Cloudy	5.0	Very dark reddish yellow	Earth	Loamy		<8.8	280	490	0.12	Very dark reddish yellow	Earth	Loamy/skeletal		<6.3	110	210	0.11						
				2012/06/06	Light rain	21.0	Very dark yellow red	Earth	Loamy		<9.4	290	450	0.14	Very dark yellow red	Earth	Loamy		<9.6	420	640	0.14						
				2012/09/26	Sunny	25.0	Dark yellow red	Faint earth	Loamy		<8.3	270	420	0.13	Very dark yellow red	Earth	Loamy		<7.0	160	270	0.12						
				2012/12/12	Sunny	12.1	Very dark reddish yellow	Earth	Loamy/sandy		<6.5	150	270	0.14	Very dark reddish yellow	Earth	Loamy/sandy		<5.5	98	140	0.13						
				2013/02/08	Sunny	5.0	Very dark reddish yellow	Earth	Loamy		<9.0	290	530	0.12	Very dark reddish yellow	Earth	Loamy		<14	610	1,100	0.12						
S y s t e m	Takedagawa River	Uchijukuhashi Bridge	Namegata City	2012/06/06	Cloudy	21.0	Dark reddish yellow	Earth	Loamy		<12	680	990	0.12	Dark reddish yellow	Earth	Loamy		<8.5	340	510	0.13						
				2012/09/27	Sunny	25.0	Dark yellow red	Earth	Loamy		<8.9	220	380	0.10	Dark yellow red	Earth	Loamy		<9.3	290	480	0.12						
				2012/12/12	Sunny	11.4	Very dark reddish yellow	Earth	Loamy/sandy/skeletal		<8.3	290	500	0.12	Very dark reddish yellow	Earth	Loamy/sandy/skeletal		<11	480	790	0.11						
				2013/02/14	Cloudy	5.3	Very dark yellow red	Earth	Loamy/skeletal		<7.7	260	490	0.12	Very dark yellow red	Earth	Loamy/skeletal		<11	450	800	0.13						
				2012/06/06	Sunny	21.0	Very dark reddish yellow	Earth	Loamy		<10	320	450	0.13	Very dark yellow red	Earth	Loamy		<16	920	1,400	0.14						
K u r a k a w a R i v e r	Kurakawa River	Kurakawabashi Bridge	Namegata City	2012/09/27	Sunny	26.0	Very dark yellow red	Earth	Loamy		<8.5	290	510	0.11	Very dark reddish yellow	Earth	Loamy		<7.6	260	400	0.12						
				2012/12/14	Sunny	6.3	Very dark reddish yellow	Earth	Loamy/skeletal		<6.8	110	220	0.13	Very dark reddish yellow	Earth	Loamy/sandy/skeletal		<9.1	340	620	0.12						
				2013/02/14	Cloudy	5.8	Very dark yellow red	Earth	Loamy/skeletal		<5.8	130	280	0.13	Very dark reddish yellow	Earth	Loamy/skeletal		<3.7	110	200	0.11						

Table 4.4.1.3 Ibaraki Pref. River (Surrounding Environment)

Sampling point				Sampling date	Weather	Air temperature °C	Surrounding Environment (Soil and Air Dose)											Remarks									
							Left bank					Right bank					Air dose µSv/h										
							Soil			Radioactive material concentrations (Bq/kg (dry))		Soil			Radioactive material concentrations (Bq/kg (dry))												
No.	Water Body	Point	Municipality	General items			Radioactive iodines I-131	Radioactive cesium Cs-134 Cs-137		Air dose µSv/h	General items			Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137												
				Color	Odor	Property					Color	Odor	Property														
R i v e r s	K i t a u r a	Gantsugawa River	JA Yokohashi	Namegatsuchi City	2012/06/06	Cloudy	21.0	Very dark reddish yellow	Earth	Loamy	<12	600	910	0.13	Very dark yellow red	Earth	Loamy	<12	450	670	0.13						
					2012/09/27	Cloudy	26.0	Dark reddish yellow	Earth	Loamy	<6.2	190	300	0.11	Very dark reddish yellow	Earth	Loamy	<9.1	330	520	0.12						
					2012/12/14	Sunny	9.1	Very dark reddish yellow	Earth	Loamy	<6.2	130	230	0.13	Very dark yellow red	Earth	Loamy	<6.8	110	200	0.13						
					2013/02/14	Cloudy	7.7	Very dark reddish yellow	Earth	Loamy/skeletal	<7.8	160	280	0.11	Very dark yellow red	Earth	Loamy/skeletal	<8.0	290	520	0.14						
		L a k e	Nagaregawa River	Suhobashi Bridge	Kashimashi City	2012/06/07	Sunny	21.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	2012/09/27					Sunny	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Soil not exposed		
	2012/12/12					Sunny	4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	2013/02/15					Rain	10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2012/05/30					Sunny	24.2	Very dark yellowish red	None	Loamy	<9.3	250	420	0.12	Very dark yellowish red	None	Loamy	<21	460	650	0.10						
	T o n e g a w a	Sonobegawa River	Sonobeshinbashi Bridge	Omitamashi City	2012/09/26	Sunny	26.0	Very dark yellow red	Earth	Loamy	<10	360	560	0.10	Very dark reddish yellow	Faint earth	Clayish	<12	240	420	0.11						
					2012/12/10	Sunny	7.0	Very dark yellow red	Earth	Loamy	<13	270	460	0.11	Very dark yellow red	Earth	Loamy	<9.9	330	600	0.12						
					2013/02/13	Sunny	11.2	Very dark yellow	Earth	Loamy	<7.7	190	360	0.13	Very dark yellow red	Earth	Loamy	<16	410	740	0.11						
					2012/05/30	Cloudy	24.3	Very dark reddish yellow	Earth	Loamy	<7.6	210	320	0.14	Very dark reddish yellow	Earth	Loamy	<10	320	480	0.12						
					2012/09/26	Sunny	27.0	Very dark yellow red	Earth	Loamy	<11	390	590	0.11	Very dark reddish yellow	Earth	Loamy	<11	380	610	0.14						
	R i v e r s	Sannogawa River	Tokorobashi Bridge	Omitamashi City	2012/12/10	Sunny	2.0	Dark reddish yellow	Earth	Skeletal	<5.6	72	130	0.12	Dark reddish yellow	Earth	Loamy	<4.8	28	47	0.13						
					2013/02/13	Sunny	10.7	Very dark yellow red	Earth	Loamy	<8.8	250	460	0.14	Very dark yellow	Earth	Loamy	<15	760	1,400	0.16						
					2012/05/30	Cloudy	22.8	Very dark yellow red	Earth	Loamy	<11	340	480	0.15	Very dark yellow red	Earth	Loamy	<24	950	1,300	0.13						
					2012/09/26	Sunny	20.0	Very dark reddish yellow	Earth	Loamy	<12	470	760	0.16	Very dark reddish yellow	Earth	Loamy	<8.9	260	420	0.15						
					2012/12/10	Sunny	5.3	Very dark yellow red	Faint earth	Loamy	<11	300	540	0.15	Very dark yellow red	Faint earth	Loamy	<6.3	150	270	0.14						
	S y s t e m	Koizogawa River	Heiwabashi Bridge	Ihiokashi City	2013/02/13	Sunny	10.7	Very dark reddish yellow	Earth	Loamy	<12	400	730	0.18	Very dark reddish yellow	Earth	Loamy	<8.2	250	480	0.18						
					2012/05/29	Sunny	24.5	Very dark yellow red	Earth	Loamy	<13	340	530	0.11	Very dark yellow red	Earth	Loamy	<8.2	130	200	0.11						
					2012/09/26	Sunny	25.0	Very dark reddish yellow	Faint earth	Sandy	<4.9	92	140	0.09	Very dark reddish yellow	Earth	Sandy	<5.7	100	160	0.10						
					2012/12/12	Sunny	8.2	Very dark reddish yellow	Earth	Loamy/sandy	<5.4	74	130	0.11	Very dark reddish yellow	Earth	Loamy/sandy	<6.3	110	180	0.13						
					2013/02/13	Sunny	8.0	Very dark yellow red	Earth	Loamy	<5.5	91	170	0.11	Very dark yellow	Earth	Loamy/sandy	<4.7	59	100	0.11						
	L a k e	Kajinagawa River	Kamishukubashi Bridge	Namegatsuchi City	2012/05/30	Sunny	23.0	Very dark yellow red	Earth	Loamy	<8.2	250	360	0.12	Very dark yellow red	Earth	Loamy	<7.4	210	320	0.13						
2012/09/25					Cloudy	21.0	Very dark reddish yellow	Earth	Sandy/loamy	<7.0	170	280	0.11	Dark yellow red	Faint earth	Loamy	<9.2	340	530	0.12							
2012/12/12					Sunny	6.5	Very dark reddish yellow	Earth	Loamy	<6.6	130	230	0.15	Very dark reddish yellow	Earth	Loamy/sandy	<11	350	580	0.13							
2013/02/13					Sunny	10.7	Very dark yellow	Earth	Loamy	<6.1	98	170	0.13	Very dark yellow	Earth	Loamy	<12	440	810	0.16							
2012/05/29					Cloudy	23.9	Very dark yellow red	Earth	Loamy	<9.1	190	260	0.11	Very dark yellow red	Earth	Loamy	<8.2	170	250	0.12							
L a k e	Ikinosogawa River	Kawanakabashi Bridge	Kasumigaura City	2012/09/25	Cloudy	22.0	Very dark yellow red	Faint earth	Loamy	<7.6	160	250	0.10	Very dark yellow red	Earth	Loamy	<8.5	200	340	0.10							
				2012/12/12	Sunny	8.1	Very dark reddish yellow	Earth	Loamy	<6.9	74	120	0.11	Very dark reddish yellow	Earth	Loamy	<6.6	96	140	0.13							
				2013/02/13	Sunny	10.2	Very dark reddish yellow	Earth	Loamy	<11	210	410	0.10	Very dark reddish yellow	Earth	Loamy	<7.8	240	410	0.10							
				2012/05/29	Cloudy	30.0	Very dark yellow red	Earth	Loamy	<9.4	390	570	0.17	Very dark yellow red	Earth	Loamy	<9.2	190	280	0.13							
				2012/09/25	Cloudy	21.0	Very dark yellow red	Earth	Loamy	<13	390	640	0.16	Very dark yellow red	Earth	Clayish	<16	840	1,500	0.12							
L a k e	Sakaigawa River	Sakabashi Bridge/Various River 154	Tsuchiumashi City	2012/12/11	Sunny	12.0	Very dark reddish yellow	Earth	Loamy	<13	440	790	0.16	Very dark reddish yellow	Earth	Loamy	<9.1	230	420	0.13							
				2013/02/12	Cloudy	4.0	Very dark reddish yellow	Earth	Loamy/skeletal	<14	610	1,100	0.18	Very dark reddish yellow	Earth	Loamy	<9.3	350	650	0.19							
				2012/05/29	Sunny	28.0	Very dark yellow red	Earth	Sandy	<8.3	240	360	0.15	Very dark yellow red	Earth	Sandy	<11	410	590	0.13							
				2012/09/25	Cloudy	22.0	Very dark reddish yellow	Earth	Loamy/sandy	<9.4	380	620	0.11	Dark yellow red	Earth	Sandy	<8.3	310	500	0.12							
				2012/12/11	Sunny	6.8	Very dark reddish yellow	Earth	Loamy	<8.6	240	440	0.14	Very dark reddish yellow	Earth	Loamy/sandy	<6.0	120	210	0.13							
L a k e	Shinkawa River	Shintenbashi Bridge	Tsuchiumashi City/ Tsukubashi City	2013/02/12	Cloudy	6.4	Very dark yellow red	Earth	Loamy	<6.2	140	270	0.17	Very dark yellow red	Earth	Loamy	<13	540	970	0.12							
				2012/05/29	Sunny	26.5	Very dark yellow red	Earth	Loamy	<8.5	180	280	0.09	Very dark yellow red	Earth	Loamy	<6.8	78	110	0.09							
				2012/09/25	Cloudy	22.0	Very dark yellow red	Earth	Clayish	<9.8	220	370	0.10	Very dark yellow red	Earth	Loamy	<11	130	190	0.09							
				2012/12/11	Sunny	4.2	Very dark yellow red	Earth	Loamy	<14	400	680	0.13	Very dark yellow red	Earth	Loamy/skeletal	<5.5	59	110	0.12							
				2013/02/13	Sunny	8.6	Very dark yellow	Earth	Loamy	<8.7	120	240	0.12	Very dark yellow red	Earth	Loamy	<6.5	120	220	0.11							
L a k e	Bizenogawa River	Bizenogawabashi Bridge	Tsuchiumashi City	2012/05/30	Sunny	24.0	Dark yellow red	Earth	Loamy	<9.2	360	550	0.09	Very dark yellow red	Earth	Loamy	<9.1	250	380	0.12							
				2012/09/25	Cloudy	20.0	Very dark yellow red	Earth	Loamy	<7.8	250	430	0.13	Very dark yellow red	Earth	Loamy	<12	470	800	0.13							
				2012/12/11	Sunny	10.6	Very dark yellow	Earth	Loamy/skeletal	<8.7	390	670	0.13	Very dark yellow red	Earth	Loamy/skeletal	<9.2	380	670	0.14							
				2013/02/12	Cloudy	6.7	Very dark reddish yellow	Earth	Loamy/skeletal	<6.6	160	290	0.14	Very dark yellow red	Earth	Loamy/skeletal	<8.0	250	460	0.14							

Table 4.4.1.3 Ibaraki Pref. River (Surrounding Environment)

Sampling point				Sampling date	Weather	Air temperature °C	Surrounding Environment (Soil and Air Dose)													Remarks		
							Left bank						Right bank									
							Soil			Air dose µSv/h			Soil			Air dose µSv/h						
No.	Water Body	Point	Municipality	General items			Radioactive material concentrations (Bq/kg (dry))			Color	Odor	Property	Radioactive iodine I-131	Radioactive cesium		Color	Odor	Property	Radioactive iodine I-131	Radioactive cesium		Air dose µSv/h
				Color	Odor	Property	Radioactive iodine I-131	Cs-134	Cs-137					Cs-134	Cs-137					Cs-134	Cs-137	
37	Hanamugawa River	Shiwabashi Bridge	Tsuchinashi City	2012/05/31	Sunny	22.5	Very dark yellow red	Earth	Loamy	<-11	420	610	0.20	Very dark yellow red	Earth	Loamy	<-11	300	420	0.19		
				2012/09/25	Cloudy	20.0	Very dark yellow red	Earth	Loamy	<-13	690	1,100	0.17	Very dark yellow red	Earth	Loamy	<-11	400	660	0.20		
				2012/12/11	Sunny	11.2	Very dark yellow	Earth	Loamy	<-12	520	890	0.22	Very dark reddish yellow	Earth	Loamy/skeletal	<-9.6	260	470	0.18		
				2013/02/12	Cloudy	6.4	Very dark reddish yellow	Earth	Loamy/skeletal	<-9.9	380	680	0.20	Very dark yellow red	Earth	Loamy	<-7.5	250	460	0.19		
38	Seimeigawa River	Katsubashi Bridge	Amimachi Town	2012/05/31	Sunny	23.0	Very dark yellow red	Earth	Loamy	<-4.7	49	70	0.19	Very dark yellow red	Earth	Loamy	<-9.5	370	550	0.19		
				2012/09/24	Sunny	23.0	Very dark yellow red	Faint earth	Loamy/sandy	<-11	360	600	0.18	Very dark yellow red	Earth	Loamy	<-11	430	720	0.19		
				2012/12/10	Sunny	8.3	Very dark reddish yellow	Earth	Loamy/sandy	<-8.5	350	610	0.21	Very dark reddish yellow	Earth	Loamy/sandy	<-11	470	790	0.21		
				2013/02/12	Cloudy	6.7	Very dark reddish yellow	Earth	Loamy/sandy	<-9.4	380	710	0.23	Very dark reddish yellow	Earth	Loamy/sandy	<-13	710	1,300	0.26		
39	Ohoogawa River	Okahanobashi Bridge	Ryugasaki City/ Utsunoki City	2012/05/31	Cloudy	24.2	Very dark yellow red	None	Loamy	<-9.1	340	490	0.20	Very dark yellow red	None	Loamy	<-14	560	820	0.20		
				2012/09/24	Sunny	24.0	Dark yellow red	Earth	Loamy	<-14	880	1,500	0.21	Very dark yellow red	Faint earth	Loamy	<-13	540	910	0.17		
				2012/12/10	Sunny	5.0	Very dark reddish yellow	Earth	Loamy	<-9.5	390	660	0.13	Very dark reddish yellow	Earth	Loamy	<-12	490	820	0.19		
				2013/02/12	Cloudy	6.9	Very dark reddish yellow	Earth	Loamy	<-11	520	980	0.14	Very dark reddish yellow	Earth	Loamy	<-11	420	760	0.18		
40	Shimonegawa River	Shitonebashi Bridge	Inashiki City	2012/05/31	Cloudy	25.8	Very dark yellow red	None	Loamy	<-11	480	710	0.09	Very dark yellow red	Earth	Loamy	<-19	1,100	1,700	0.12		
				2012/09/24	Cloudy	26.0	Very dark yellow red	Earth	Loamy	<-8.2	250	410	0.12	Very dark yellow red	Earth	Loamy	<-8.2	210	340	0.09		
				2012/12/14	Sunny	9.3	Dark reddish yellow	Earth	Sandy	<-6.3	130	220	0.15	Very dark greenish yellow	Earth	Loamy/skeletal	<-8.5	200	330	0.17		
				2013/02/14	Cloudy	7.7	Very dark reddish yellow	Earth	Sandy	<-9.4	370	690	0.10	Very dark yellow red	Earth	Loamy/skeletal	<-8.0	240	450	0.11		
41	Yasokoshigawa River	Horinochibashi Bridge	Hakoshi City	2012/06/07	Sunny	22.0	Very dark yellow	Earth	Loamy	<-7.9	210	310	0.09	Very dark reddish yellow	Earth	Loamy	<-7.6	180	270	0.11		
				2012/09/13	Sunny	31.4	Dark reddish yellow	Earth	Loamy	<-5.8	130	210	0.08	Very dark reddish yellow	Earth	Loamy	<-8.8	130	240	0.10		
				2012/12/14	Sunny	2.1	Very dark yellow	Earth	Loamy/sandy	<-6.9	130	240	0.10	Very dark reddish yellow	Earth	Loamy/skeletal	<-7.6	89	150	0.10		
				2013/02/14	Cloudy	8.9	Very dark yellow red	Earth	Loamy	<-7.8	210	390	0.10	Very dark yellow red	Earth	Loamy	<-6.4	100	190	0.11		
42	Mackawa River	Ajamehashi Bridge	Chikusetsu City	2012/06/07	Sunny	22.0	Dark reddish yellow	Earth	Sandy	<-7.6	210	320	0.09	Dark yellow red	Earth	Loamy	<-5.4	66	88	0.10		
				2012/09/13	Sunny	13.2	Dark reddish yellow	Earth	Loamy	<-5.3	41	64	0.07	Very dark reddish yellow	Earth	Loamy	<-6.8	99	150	0.06		
				2012/12/14	Sunny	4.0	Very dark reddish yellow	Earth	Loamy	<-5.1	90	160	0.10	Dull reddish yellow	None	Sandy	<-4.5	16	28	0.07		
				2013/02/15	Cloudy	8.3	Very dark yellow	Earth	Loamy	<-4.8	51	86	0.08	Very dark reddish yellow	Earth	Sandy	<-7.1	210	390	0.07		
43	Kawahimabashi Bridge	Chikusetsu City	Chikusetsu City	2012/06/05	Sunny	25.0	Very dark reddish yellow	Earth	Loamy	<-5.3	69	100	0.09	Very dark yellow red	Earth	Loamy	<-5.6	75	110	0.09		
				2012/09/12	Sunny	28.9	Soft reddish yellow	Earth	Sandy	<-5.0	78	130	0.09	Deep reddish yellow	Earth	Loamy	<-5.7	71	110	0.08		
				2012/12/19	Sunny	6.2	Very dark reddish yellow	Earth	Loamy	<-5.4	82	160	0.10	Very dark yellow red	Earth	Loamy	<-5.9	38	77	0.09		
				2013/02/12	Cloudy	3.3	Very dark yellow red	None	Loamy	<-6.2	94	160	0.09	Very dark reddish yellow	None	Loamy	<-6.5	75	130	0.07		
44	Kinugawa River	Takishitabashi Bridge	Moriyoshi City	2012/06/01	Cloudy	23.2	Very dark yellow red	Earth	Loamy	<-1.6	830	1,200	0.16	Very dark yellow	Faint earth	Sandy	<-7.0	65	110	0.11		
				2012/06/22	Light rain	26.0	Very dark yellow red	Faint earth	Loamy	<-13	410	590	0.15	Very dark reddish yellow	Faint earth	Loamy	<-3.3	83	120	0.08		
				2012/07/20	Cloudy	22.0	Dark yellow red	Earth	Loamy	<-12	420	640	0.20	Very dark yellow red	Earth	Loamy	<-8.5	250	370	0.19		
				2012/08/24	Sunny	34.3	Dark reddish yellow	Faint earth	Loamy	<-8.3	290	460	0.14	Dull yellow red	Faint earth	Loamy/sandy	<-5.2	32	43	0.13		
				2012/09/13	Sunny	28.2	Very dark reddish yellow	Earth	Loamy	<-13	620	990	0.18	Soft yellow green	None	Sandy	<-3.2	53	90	0.11		
				2012/12/20	Sunny	5.9	Very dark reddish yellow	None	Loamy	<-14	530	950	0.17	Very dark yellow red	None	Loamy	<-13	450	790	0.18		
				2013/02/13	Sunny	7.7	Very dark yellow red	Faint earth	Loamy	<-12	330	610	0.13	Very dark yellow red	Earth	Loamy	<-11	310	560	0.15		
45	Tagawa River	Tagawabashi Bridge	Chikusetsu City	2012/06/05	Sunny	24.0	Reddish yellowish dark gray	Earth	Loamy	<-6.2	47	67	0.08	Reddish yellowish dark gray	Earth	Loamy	<-6.6	48	70	0.08		
				2012/09/12	Sunny	30.4	Dark reddish yellow	Earth	Loamy	<-6.5	78	140	0.08	Dark reddish yellow	Earth	Loamy	<-6.5	69	130	0.08		
				2012/12/19	Sunny	6.2	Very dark yellow red	Earth	Loamy	<-6.7	36	74	0.09	Very dark yellow red	Earth	Loamy	<-5.0	57	110	0.09		
				2013/02/12	Cloudy	5.9	Very dark yellow red	None	Loamy	<-6.2	66	110	0.07	Very dark yellow red	None	Loamy/skeletal	<-4.7	27	48	0.07		
46	Kokogawa River	Kurokobashi Bridge	Chikusetsu City	2012/06/05	Sunny	24.0	Yellow reddish black	Earth	Loamy	<-9.8	240	360	0.10	Very dark reddish yellow	Earth	Loamy	<-8.9	130	180	0.08		
				2012/09/12	Sunny	28.6	Dark reddish yellow	Earth	Loamy	<-7.0	79	140	0.09	Dark reddish yellow	Earth	Loamy	<-7.5	140	220	0.08		
				2012/12/19	Sunny	4.1	Dark yellow	Earth	Loamy	<-7.5	110	180	0.09	Dark reddish yellow	Earth	Loamy	<-8.0	92	170	0.10		
				2013/02/12	Cloudy	4.8	Very dark reddish yellow	Faint earth	Loamy	<-8.5	120	220	0.10	Very dark yellow red	Earth	Loamy	<-6.7	89	150	0.08		
47	Fumimikabashi Bridge	Torideshi City	Torideshi City	2012/06/04	Sunny	28.0	Dark grayish yellow	Earth	Loamy	<-11	210	300	0.13	Dark grayish yellow	Earth	Loamy	<-7.9	200	310	0.13		
				2012/09/13	Sunny	29.5	Dark reddish yellow	Earth	Loamy	<-12	330	550	0.14	Dull reddish yellow	Earth	Loamy	<-9.3	400	610	0.15		
				2012/12/20	Sunny	7.1	Dark reddish yellow	None	Loamy	<-9.6	290	550	0.13	Very dark reddish yellow	Faint earth	Loamy	<-7.8	160	290	0.14		
				2013/02/13	Sunny	9.5	Very dark yellow red	Earth	Loamy	<-12	430	790	0.14	Very dark reddish yellow	Earth	Loamy	<-8.1	200	360	0.13		
48	Yatagawa River	Maruyamabashi Bridge	Tsukubashi City	2012/06/04	Sunny	28.0	Very dark yellow red	Earth	Loamy	<-13	530	770	0.14	Very dark yellow red	Earth	Loamy	<-10	440	650	0.14		
				2012/12/20	Sunny	8.6	Very dark reddish yellow	Earth	Loamy	<-14	860	1,500	0.17	Very dark reddish yellow	Earth	Loamy	<-12	530	940	0.14		

Table 4.4.1.3 Ibaraki Pref. River (Surrounding Environment)

Sampling point				Sampling date	Weather	Air temperature °C	Surrounding Environment (Soil and Air Dose)													Remarks			
							Left bank						Right bank										
No.	Water Body	Point	Municipality	Soil			Air dose μSv/h			Soil			Air dose μSv/h										
				General items			Radioactive material concentrations (Bq/kg (dry))			General items			Radioactive material concentrations (Bq/kg (dry))										
				Color	Odor	Property	Radioactive iodines I-131	Radioactive cesium Cs-134 Cs-137		Color	Odor	Property	Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137									
R i v e r s	K o r i v e r g a w a	Nashiyatagawa River	Sakaimatsubashi Bridge	Tsukubashi City	2012/06/04	Sunny	27.0	Very dark yellow red	Earth	Loamy	<7.9	83	130	0.06	Reddish yellowish black	Earth	Loamy	<9.2	200	260	0.08		
					2012/12/21	Sunny	5.8	Very dark reddish yellow	Earth	Loamy	<7.5	42	78	0.08	Very dark reddish yellow	Earth	Loamy	<12	330	570	0.13		
		I n a r i g a w a	Inarigawa River	Ogakibashi Bridge	Tsukubashi City	2012/06/04	Sunny	26.0	Very dark reddish yellow	Earth	Loamy	<9.4	230	350	0.15	Very dark reddish yellow	Earth	Loamy	<17	930	1,300	0.17	
						2012/09/12	Sunny	26.2	Dark reddish yellow	Earth	Loamy	<19	1,500	2,300	0.15	Very dark reddish yellow	Earth	Loamy	<12	590	980	0.19	
						2012/12/20	Sunny	5.5	Very dark reddish yellow	Earth	Loamy	<14	570	1,000	0.15	Very dark reddish yellow	Earth	Loamy	<13	490	850	0.17	
						2013/02/13	Sunny	8.7	Very dark reddish yellow	Earth	Loamy/skeletal	<8.1	270	510	0.14	Very dark yellow red	Earth	Loamy/skeletal	<9.7	290	580	0.16	
	T o n e g a w a	Tonogawa River	Karihashi Bridge	Kogashi City	2012/06/01	Sunny	26.5	Very dark reddish yellow	Earth	Loamy	<6.1	110	160	0.07	Very dark reddish yellow	Earth	Loamy	<7.5	86	130	0.08		
					2012/06/22	Light rain	20.0	Very dark reddish yellow	Faint earth	Loamy	<7.6	180	280	0.10	Dark yellow red	Faint earth	Loamy	<7.7	100	150	0.10		
					2012/07/20	Cloudy	20.0	Dark reddish yellow	Faint earth	Loamy	<6.8	180	280	0.10	Dull reddish yellow	None	Sandy	<7.0	140	240	0.08		
					2012/08/24	Sunny	31.7	Dark reddish yellow	Earth	Loamy	<5.8	36	54	0.10	Dull yellow red	Earth	Loamy	<7.5	150	250	0.10		
					2012/09/12	Sunny	31.2	Dark reddish yellow	Earth	Loamy	<6.5	120	200	0.08	Dark reddish yellow	Earth	Loamy	<11	190	320	0.08		
					2012/12/19	Sunny	3.5	Very dark yellow red	Earth	Loamy	<8.4	130	240	0.10	Very dark yellow red	Earth	Loamy	<6.5	71	150	0.08		
S y s t e m	Tonogawa River	Fukawa	Tonemachi Town	2013/02/13	Sunny	4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Unable to collect samples due to snow on the ground
				2012/06/04	Sunny	28.0	Dark grayish yellow	Earth	Loamy	<7.6	300	460	0.19	Dark grayish yellow	Earth	Loamy	<9.1	290	470	0.15			
				2012/09/13	Sunny	30.8	Deep reddish yellow	Earth	Loamy	<12	510	850	0.22	Deep reddish yellow	Earth	Loamy	<12	600	1,000	0.16			
				2012/12/20	Sunny	9.4	Very dark reddish yellow	Earth	Loamy	<8.4	260	460	0.18	Very dark reddish yellow	Earth	Loamy	<12	490	860	0.18			
				2013/02/13	Sunny	10.3	Very dark reddish yellow	Earth	Loamy	<7.8	230	420	0.15	-	-	-	-	-	-	-	-	-	(Right bank) Unable to collect samples due to construction
I n a s h i k i s h i	Sawara	Inashikishi City	2012/05/31	Cloudy	25.0	Very dark reddish yellow	Earth	Loamy	<6.8	75	130	0.06	Very dark reddish yellow	None	Loamy	<14	500	710	0.10				
			2012/06/22	Cloudy	22.0	Very dark yellow red	Earth	Loamy	<5.7	68	99	0.06	Very dark yellowish red	Faint earth	Loamy	<8.6	300	440	0.10				
			2012/07/19	Sunny	31.6	Dark yellow red	Earth	Loamy	<7.2	130	210	0.09	Pale reddish yellow	None	Sandy	<12	450	700	0.12				
			2012/08/20	Sunny	31.5	Dark reddish yellow	Earth	Loamy	<7.7	180	330	0.08	Dark reddish yellow	Earth	Loamy	<11	340	490	0.12				
			2012/09/14	Sunny	29.7	Dark reddish yellow	Earth	Loamy	<8.5	190	300	0.08	Very dark yellow red	Earth	Loamy	<13	450	730	0.11				
			2012/12/21	Cloudy	7.8	Very dark reddish yellow	Earth	Loamy	<7.3	120	240	0.08	Very dark yellow red	None	Loamy	<8.3	140	280	0.12				
			2013/02/15	Rain	6.8	Dark reddish yellow	Earth	Loamy	<5.2	31	47	0.06	Very dark yellow red	None	Loamy/skeletal	<11	380	730	0.10				

Table 4.4.2.1 Ibaraki Pref. Lake and Headwater (Water Quality)

Lake and headwaters	Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Water quality										Remarks	
	No.	Water Body	Municipality	Surface layer/Bottom layer					General items					Radioactive material concentrations (Bq/L)						
									Water temperature °C	Sampling depth m	Color	Odor	Secchi disk depth m	Electrical conductivity mS/m	SS mg/L	Turbidity	I-131	Radioactive cesium Cs-134		Cs-137
L a k e s h e a d w a t e r s	54	Hirouma		Surface layer	2012/06/06	Cloudy	19.5	2.6	22.5	0.5	Dark grayish reddish yellow	None	0.6	401	9.2	7.0	-0.48	-0.67	-0.54	
				Bottom layer					22.5	1.6	-	None		415	9.6	6.7	-0.63	-0.80	-0.70	
				Surface layer	2012/09/12	Sunny	30.0	2.5	29.3	0.5	Grayish yellow	None	1.2	1,175	1.1	1.2	-0.56	-0.70	-0.60	
				Bottom layer					29.1	1.5	-	None		1,174	1.0	0.8	-0.54	-0.68	-0.57	
				Surface layer	2012/12/11	Sunny	9.7	3.0	7.7	0.5	Grayish yellow	None	2.4	2,130	2.8	2.3	-0.73	-0.80	-0.57	
				Bottom layer					8.0	2.0	-	None		2,140	3.7	2.5	-0.65	-0.66	-0.68	
	Surface layer	2013/02/20	Sunny	3.4	2.7	2.1	0.5	Dark grayish greenish yellow	None	2.2	814	3.4	2.7	-0.73	-0.80	-0.73				
	Bottom layer					4.1	1.7	-	None		1,188	2.9	2.4	-0.59	-0.78	-0.66				
	55	Hinuma Lake	Miyamae	Ibarakimachi Town	Surface layer	2012/06/06	Cloudy	19.4	3.1	21.5	0.5	Dark grayish reddish yellow	None	0.7	332	5.9	4.3	-0.42	-0.59	-0.55
					Bottom layer					21.5	2.1	-	None		312	7.8	5.3	-0.50	-0.63	-0.59
					Surface layer	2012/09/12	Sunny	30.0	2.9	29.0	0.5	Dark grayish reddish yellow	None	1.1	1,090	1.9	1.6	-0.51	-0.74	-0.45
					Bottom layer					28.2	1.9	-	None		1,820	1.2	1.4	-0.69	-0.80	-0.66
					Surface layer	2012/12/11	Sunny	9.5	3.3	7.5	0.5	Grayish yellow	None	2.4	2,050	2.6	1.8	-0.47	-0.72	-0.52
					Bottom layer					7.5	2.3	-	None		2,090	2.4	1.4	-0.46	-0.56	-0.53
	Surface layer	2013/02/20	Sunny	3.2	3.2	4.2	0.5	Dark grayish greenish yellow	None	2.2	1,013	2.2	2.2	-0.54	-0.59	-0.66				
	Bottom layer					4.9	2.2	-	None		1,165	2.7	2.5	-0.53	-0.68	-0.62				
	56		Oyazawa		Surface layer	2012/06/06	Cloudy	19.4	2.3	21.3	0.5	Dark grayish reddish yellow	None	0.8	193.0	7.3	5.2	-0.55	-0.70	-0.62
					Bottom layer					21.0	1.3	-	None		248	7.2	5.2	-0.70	-0.72	-0.68
					Surface layer	2012/09/12	Sunny	31.0	1.9	29.1	0.5	Grayish yellow	None	0.8	1,085	2.5	1.6	-0.48	-0.64	-0.54
					Bottom layer					28.3	0.9	-	None		1,175	4.9	2.4	-0.54	-0.64	-0.62
					Surface layer	2012/12/11	Sunny	9.2	2.6	7.7	0.5	Grayish yellow	None	2.3	1,950	1.1	0.9	-0.48	-0.61	-0.56
					Bottom layer					7.6	1.6	-	None		1,960	1.4	0.9	-0.46	-0.56	-0.57
	Surface layer	2013/02/20	Sunny	3.1	2.3	5.5	0.5	Dark grayish greenish yellow	None	1.8	1,016	2.3	2.4	-0.50	-0.67	-0.47				
	Bottom layer					6.2	1.3	-	None		1,290	3.7	3.9	-0.41	-0.48	-0.64				
57		Offshore of Tamatsukui	Namegatah City	Surface layer	2012/06/27	Cloudy	22.0	6.9	23.0	0.5	Pale green	None	0.7	22.8	15	8.6	-0.56	-0.80	-0.64	
				Bottom layer					22.8	5.9	-	None		20.8	22	11	-0.58	-0.64	-0.55	
				Surface layer	2012/09/12	Sunny	29.0	6.8	31.0	0.5	Pale green	None	0.5	32.8	9.3	4.7	-0.43	-0.70	-0.69	
				Bottom layer					29.5	5.8	-	None		27.7	19	7.3	-0.41	-0.58	-0.62	
				Surface layer	2012/12/05	Sunny	12.2	7.1	9.4	0.5	Pale dull greenish brown	None	0.6	33.8	5.5	5.3	-0.58	-0.85	-0.60	
				Bottom layer					8.8	6.1	-	None		33.0	5.5	7.5	-0.43	-0.48	-0.54	
Surface layer	2013/02/20	Sunny	8.5	6.9	7.1	0.5	Low green	None	0.8	33.8	9.5	8.2	-0.62	-0.70	-0.70					
Bottom layer					6.1	5.9	-	None		34.0	10	8.8	-0.60	-0.60	-0.64					
58	Kasumigaura Lake	Offshore of Kakeuma	Ainamichi Town	Surface layer	2012/06/27	Cloudy	20.8	1.7	23.0	0.5	Pale greenish brown	None	0.6	24.5	13	9.0	-0.44	-0.65	-0.62	
				Bottom layer					22.8	1.2	-	None		24.8	18	8.9	-0.60	-0.72	-0.66	
				Surface layer	2012/09/12	Sunny	29.5	1.9	30.0	0.5	Pale green	None	0.5	36.0	15	5.0	-0.55	-0.85	-0.64	
				Bottom layer					30.0	1.4	-	None		32.7	14	4.7	-0.62	-0.68	-0.63	
				Surface layer	2012/12/05	Sunny	9.0	2.1	8.7	0.5	Pale dull grayish green	None	0.4	34.2	7.7	12	-0.57	-0.59	-0.66	
				Bottom layer					8.5	1.1	-	None		34.2	12	10	-0.64	-0.85	-0.64	
Surface layer	2013/02/20	Sunny	6.4	2.1	5.3	0.5	Low green	None	0.7	34.3	12	12	-0.40	-0.56	-0.47					
Bottom layer					5.3	1.1	-	None		34.4	11	12	-0.47	-0.61	-0.47					
59		Center of the lake	Mihomura Village	Surface layer	2012/06/27	Sunny	19.0	6.2	22.0	0.5	Pale greenish brown	None	0.8	25.1	13	7.8	-0.51	-0.59	-0.57	
				Bottom layer					22.1	5.2	-	None		25.2	14	7.4	-0.47	-0.56	-0.54	
				Surface layer	2012/09/12	Sunny	24.5	6.2	28.3	0.5	Pale green	None	0.8	42.5	7.9	4.2	-0.43	-0.53	-0.50	
				Bottom layer					28.3	5.2	-	None		42.5	13	5.2	-0.70	-0.80	-0.64	
				Surface layer	2012/12/05	Sunny	7.1	6.4	8.8	0.5	Pale dull greenish brown	None	0.8	32.6	4.7	5.7	-0.43	-0.60	-0.47	
				Bottom layer					8.9	5.4	-	None		33.3	5.0	5.2	-0.52	-0.78	-0.64	
Surface layer	2013/02/20	Sunny	2.0	6.3	4.5	0.5	Green	None	0.8	35.0	8.3	8.2	-0.47	-0.64	-0.63					
Bottom layer					4.7	5.3	-	None		35.0	8.7	8.2	-0.59	-0.50	-0.69					

Table 4.4.2.1 Ibaraki Pref. Lake and Headwater (Water Quality)

Lake and headwaters	Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Water quality											Remarks				
	No.	Water Body	Municipality	Surface layer/Bottom layer					General items						Radioactive material concentrations (Bq/L)									
									Water temperature °C	Sampling depth m	Color	Odor	Secchi disk depth m	Electrical conductivity mS/m	SS mg/L	Turbidity	I-131	Radioactive cesium Cs-134	Cs-137					
L a k e s h e a d w a t e r s	60	Kasumigaura Lake	Offshore of Aso	Inashiki City	Surface layer	2012/06/27	Cloudy	17.2	1.8	21.0	0.5	Pale greenish brown	None	0.5	26.0	12	8.2	-0.55	-0.59	-0.66				
					Bottom layer					21.0	1.3	-	None		25.4	16	9.3	-0.47	-0.65	-0.59				
					Surface layer	2012/09/12	Sunny	24.3	1.7	28.1	0.5	Pale green	None	0.6	39.2	15	5.2	-0.55	-0.68	-0.53				
					Bottom layer					27.9	1.2	-	None		37.5	14	3.6	-0.59	-0.70	-0.56				
					Surface layer	2012/12/05	Sunny	4.9	1.7	7.6	0.5	Pale dull greenish brown	None	0.4	37.2	11	9.3	-0.44	-0.56	-0.52				
					Bottom layer					7.8	0.7	-	None		36.8	12	9.3	-0.59	-0.56	-0.60				
	Surface layer	2013/02/20	Sunny	0.9	1.8	3.5	0.5	Green	None	0.7	38.9	14	11	-0.51	-0.56	-0.56								
	Bottom layer					4.0	0.8	-	None		39.0	13	11	-0.43	-0.53	-0.60								
	61	Kitara Lake	Offshore of Kamaya	Namegata City	Surface layer	2012/06/27	Sunny	17.0	6.8	22.0	0.5	Pale yellow green	Slight seaweed	0.8	27.3	10	5.5	-0.59	-0.60	-0.73				
					Bottom layer					21.9	5.8	-	None		27.2	7.0	3.8	-0.58	-0.64	-0.59				
					Surface layer	2012/09/12	Sunny	26.1	6.6	29.2	0.5	Pale yellow green	None	0.5	57.1	8.9	3.8	-0.55	-0.43	-0.59				
					Bottom layer					29.5	5.6	-	None		37.1	34	8.4	-0.51	-0.53	-0.56				
					Surface layer	2012/12/05	Sunny	8.1	6.9	9.7	0.5	Pale dull green	None	0.9	33.1	6.2	5.8	-0.43	-0.61	-0.57				
					Bottom layer					10.0	5.9	-	None		32.4	8.5	5.8	-0.53	-0.53	-0.58				
					Surface layer	2013/02/20	Sunny	0.2	6.9	5.1	0.5	Grayish green	None	0.9	35.4	8.5	6.3	-0.57	-0.63	-0.66				
					Bottom layer					5.5	5.9	-	None		35.5	12	7.3	-0.53	-0.60	-0.66				
					62	Kitara Lake	Inagubashi Bridge	Hakohi City	Surface layer	2012/06/27	Sunny	17.2	2.4	22.5	0.5	Pale yellow green	Slight seaweed	0.4	29.2	20	8.2	-0.48	-0.67	-0.54
									Bottom layer					22.3	1.9	-	None		29.1	27	13	-0.59	-0.83	-0.60
									Surface layer	2012/09/12	Sunny	29.3	2.3	30.0	0.5	Pale yellowish brown	None	0.2	48.0	19	7.5	-0.47	-0.56	-0.49
									Bottom layer					29.5	1.8	-	None		51.3	26	8.0	-0.59	-0.94	-0.73
	Surface layer	2012/12/05	Sunny	8.7					2.2	9.7	0.5	Pale dull green	None	0.5	47.1	7.3	7.6	-0.65	-0.75	-0.60				
	Bottom layer									9.1	1.2	-	None		43.1	8.5	7.8	-0.44	-0.50	-0.52				
	Surface layer	2013/02/20	Sunny	4.0					2.3	6.0	0.5	Grayish green	None	0.6	47.9	11	9.0	-0.55	-0.70	-0.51				
	Bottom layer									6.1	1.3	-	None		48.5	12	8.7	-0.52	-0.68	-0.57				
63	Hitachinonegawa River	Sotomatsukura Lake	Hakohi City	Surface layer					2012/06/27	Sunny	19.0	1.8	23.0	0.5	Pale yellow green	None	0.6	29.4	14	7.4	-0.46	-0.61	-0.59	
				Bottom layer									23.0	1.3	-	None		28.4	13	6.1	-0.61	-0.78	-0.64	
				Surface layer					2012/09/12	Sunny	29.2	1.7	30.5	0.5	Pale yellowish brown	None	0.6	61.3	5.2	3.8	-0.55	-0.61	-0.59	
				Bottom layer									30.0	1.2	-	None		61.9	15	5.1	-0.46	-0.48	-0.59	
				Surface layer	2012/12/05	Sunny	10.0	2.1	10.1	0.5	Pale dull green	None	0.7	52.5	6.0	5.5	-0.51	-0.72	-0.62					
				Bottom layer					10.0	1.1	-	None		53.9	6.5	5.8	-0.58	-0.73	-0.66					
				Surface layer	2013/02/20	Sunny	6.0	1.9	6.0	0.5	Grayish green	None	0.6	50.6	12	9.5	-0.50	-0.61	-0.52					
				Bottom layer					6.9	0.9	-	None		51.6	13	9.4	-0.48	-0.48	-0.60					
				64	Hitachinonegawa River	Ikuu	Kamisu City	Surface layer	2012/06/27	Sunny	18.5	5.1	22.9	0.5	Pale yellow green	None	0.5	30.2	23	11	-0.58	-0.61	-0.62	
								Bottom layer					22.5	4.1	-	None		30.1	24	12	-0.57	-0.83	-0.58	
								Surface layer	2012/09/12	Sunny	29.0	5.2	30.3	0.5	Pale yellowish brown	None	0.7	12.7	3.5	2.2	-0.64	-0.75	-0.54	
								Bottom layer					29.5	4.2	-	None		24.4	3.5	2.4	-0.49	-0.67	-0.49	
Surface layer	2012/12/05	Sunny	10.2					5.4	10.2	0.5	Pale dull green	None	0.8	56.1	5.9	5.1	-0.50	-0.63	-0.56					
Bottom layer									10.3	4.4	-	None		118.7	7.0	6.1	-0.50	-0.68	-0.69					
Surface layer	2013/02/20	Sunny	5.8					5.1	7.0	0.5	Grayish green	None	0.5	57.6	11	8.7	-0.56	-0.85	-0.66					
Bottom layer									7.8	4.1	-	None		57.8	11	9.0	-0.74	-0.83	-0.58					
65	Ushikumama Lake	Center of Ushikumama Lake	Ryugasaki City					Surface layer	2012/06/19	Cloudy	25.5	1.6	23.8	0.5	Dark grayish yellow green	None	0.7	21.4	13	6.4	-0.52	-0.65	-0.58	
								Bottom layer					24.1	0.6	-	None		19.5	18	9.8	-0.59	-0.66	-0.64	
								Surface layer	2012/09/13	Sunny	30.6	1.3	29.5	0.5	Dark grayish yellowish green	Faint mold	0.3	28.2	29	9.0	-0.56	-0.56	-0.62	
								Bottom layer					-	-	-	-		-	-	-	-	-	-	Collected only from the surface layer due to shallow water
				Surface layer	2012/12/06	Sunny	13.5	1.4	9.0	0.5	Yellowish white	None	0.8	35.8	11	7.3	-0.49	-0.61	-0.51					
				Bottom layer					-	-	-	-		-	-	-	-	-	-	Collected only from the surface layer due to shallow water				
Surface layer	2013/02/21	Sunny	4.2	1.3	4.1	0.5	Dark grayish yellow green	None	0.6	20.2	15	10	-0.57	-0.66	-0.81									
Bottom layer					-	-	-	-		-	-	-	-	-	-	Collected only from the surface layer due to shallow water								

Table 4.4.2.2 Ibaraki Pref. Lake and Headwater (Sediment)

Sampling point			Sampling date	Weather	Air temperature °C	Full depth m	Sediment													Concentration of radioactive material (Bq/kg dried mud)			Remarks	
No.	Water Body	Municipality					General items										Moist content %	Density g/cm ³	Property	Radioactive iodine I-131	Radioactive cesium			
							Mud temperature °C	Mud sampling depth cm	Color	Odor	Mechanical composition %					Radioactive cesium Cs-134					Radioactive cesium Cs-137			
				Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay														
54	Hiroua	Ibaraki City	2012/06/06	Cloudy	19.5	2.6	20.0	5	Yellow reddish light gray	Sludge	0.0	0.0	0.0	2.7	35.1	60.4	1.8	53.0	2.61	Silt	<10	80	120	
			2012/09/12	Sunny	30.0	2.5	27.0	13	Yellowish black	Sludge	0.0	0.0	3.0	7.7	25.1	62.9	1.3	44.2	2.544	Silt	<9.6	39	83	
			2012/12/11	Sunny	9.7	3.0	9.1	5	Yellow reddish black	None	0.0	0.0	0.0	3.9	34.3	61.3	0.5	51.1	2.600	Silt	<10	79	140	
			2013/02/20	Sunny	3.4	2.7	7.3	5	Dark grayish greenish yellow	Sludge	0.0	0.0	0.0	1.0	29.8	68.0	1.1	52.1	2.621	Silt/mud	<8.0	79	140	
	55	Hinuma Lake	Miyamae	2012/06/06	Cloudy	19.4	3.1	20.0	5	Yellow reddish light gray	Sludge	0.0	0.0	0.5	14.7	26.0	56.0	2.6	43.6	2.559	Silt	<9.6	69	110
				2012/09/12	Sunny	30.0	2.9	27.1	5	Greenish yellowish black	Sludge	0.0	0.0	2.6	14.8	23.6	55.1	4.0	41.5	2.551	Silt	<9.8	31	67
				2012/12/11	Sunny	9.5	3.3	11.4	10	Yellow reddish black	Sludge	0.0	0.0	0.9	10.5	21.9	62.6	4.2	36.9	2.58	Silt	<22	42	76
				2013/02/20	Sunny	3.2	3.2	9.4	8	Greenish yellowish black	Sludge	0.0	0.0	1.8	18.2	25.2	52.3	2.5	41.1	2.566	Silt	<9.1	74	110
	56	Oyazawa	Ibaraki City	2012/06/06	Cloudy	19.4	2.3	21.3	5	Dark grayish yellow red	Sludge	0.0	0.0	0.0	3.2	33.6	62.8	0.5	57.1	2.474	Silt	<11	210	340
				2012/09/12	Sunny	31.0	1.9	27.0	3	Yellowish black	Sludge	0.0	0.0	0.0	2.7	31.5	63.8	2.0	45.2	2.49	Silt	<12	310	500
				2012/12/11	Sunny	9.2	2.6	11.8	10	Yellow reddish black	Sludge	0.0	0.0	0.0	12.2	26.7	60.4	0.7	40.2	2.522	Silt	<15	240	450
				2013/02/20	Sunny	3.1	2.3	8.8	5	Greenish yellowish black	Sludge	0.0	0.0	0.0	2.7	36.8	60.1	0.4	41.4	2.523	Silt	<15	210	400
57	Offshore of Tamatsukuri	Namegatahara City	2012/06/27	Cloudy	22.0	6.9	21.8	10	Brownish black	Earth	0.0	0.0	0.0	3.8	37.3	56.4	2.5	36.5	2.42	Silt	<13	88	140	
			2012/09/12	Sunny	29.0	6.8	28.2	10	Olive black	Slight earth	0.0	0.0	13.2	19.3	26.9	39.5	1.1	33.5	2.411	Silt	<12	71	130	
			2012/12/05	Sunny	12.2	7.1	10.4	10	Black	Slight earth	0.0	0.0	0.0	2.8	32.0	62.0	3.2	32.1	2.411	Silt	<17	130	240	
			2013/02/20	Sunny	8.5	6.9	6.8	10	Very dark brown	None	0.0	0.0	2.0	22.3	33.1	41.9	0.8	36.2	2.411	Silt	<16	320	570	
58	Offshore of Kakeuma	Ammachi Town	2012/06/27	Cloudy	20.8	1.7	22.2	10	Dark brown	None	0.0	0.0	5.5	42.6	30.2	21.1	0.6	79.6	2.721	Sand	<7.5	240	370	
			2012/09/12	Sunny	29.5	1.9	29.0	10	Brownish black	None	0.0	1.9	1.3	76.8	16.5	3.5	0.0	81.0	2.723	Sand	<6.5	160	270	
			2012/12/05	Sunny	9.0	2.1	9.0	10	Grayish olive	None	0.0	0.5	0.0	64.9	32.4	2.2	0.0	84.0	2.7	Sand	<5.2	92	160	
			2013/02/20	Sunny	6.4	2.1	6.3	10	Brownish black	None	1.0	0.5	0.9	55.9	38.5	3.2	0.0	83.0	2.702	Sand	<5.5	90	180	
59	Center of the lake	Mihomun Village	2012/06/27	Sunny	19.0	6.2	22.0	10	Brownish black	Earth	0.0	0.0	5.8	19.7	34.2	38.8	1.6	33.5	2.288	Silt	<11	58	120	
			2012/09/12	Sunny	24.5	6.2	27.8	10	Brownish black	Slight earth	0.0	0.0	0.5	23.7	35.3	39.2	1.3	28.7	2.396	Silt	<16	53	98	
			2012/12/05	Sunny	7.1	6.4	10.6	10	Olive black	Slight earth	0.0	0.0	0.5	23.7	32.4	41.6	1.8	27.6	2.388	Silt	<21	220	410	
			2013/02/20	Sunny	2.0	6.3	6.2	10	Brownish black	None	0.0	0.0	23.6	27.9	26.9	21.3	0.3	29.3	2.38	Clay	<13	100	210	
60	Offshore of Aso	Inashiki City	2012/06/27	Cloudy	17.2	1.8	21.0	10	Dark brown	Earth	0.0	0.0	4.0	38.4	57.7	0.0	0.0	86.0	2.705	Sand	<5.1	73	110	
			2012/09/12	Sunny	24.3	1.7	27.2	10	Brownish black	Slight fish and shellfish	0.0	0.0	0.0	34.8	63.7	1.5	0.0	83.7	2.719	Sand	<6.0	72	130	
			2012/12/05	Sunny	4.9	1.7	7.9	10	Olive black	Slight fish and shellfish	0.0	0.2	0.0	39.4	60.0	0.3	0.0	85.6	2.705	Sand	<5.0	66	120	
			2013/02/20	Sunny	0.9	1.8	3.2	10	Brownish black	None	0.0	0.0	0.0	36.7	63.2	0.1	0.0	82.1	2.711	Sand	<5.7	63	120	
61	Offshore of Kamaya	Namegatahara City	2012/06/27	Sunny	17.0	6.8	22.0	10	Dark gray	hydrogen sulfide	0.0	0.0	13.9	13.5	33.0	39.1	0.5	28.7	2.322	Silt	<20	190	320	
			2012/09/12	Sunny	26.1	6.6	30.0	10	Olive black	Slight earth	0.0	0.0	1.1	12.7	35.0	50.5	0.7	26.2	2.325	Silt	<22	200	320	
			2012/12/05	Sunny	8.1	6.9	11.2	10	Olive black	Slight earth	0.0	0.0	0.0	7.4	40.8	50.4	1.5	27.9	2.333	Silt	<12	89	150	
			2013/02/20	Sunny	0.2	6.9	5.8	10	Olive black	None	0.0	0.0	42.3	12.8	20.8	23.9	0.2	30.8	2.314	Silt	<17	210	400	
62	Jingubashi Bridge	Itakoshi City	2012/06/27	Sunny	17.2	2.4	21.2	10	Brownish black	None	0.0	0.0	0.0	11.6	76.3	12.1	0.0	76.3	2.671	Sand	<4.2	43	63	
			2012/09/12	Sunny	29.3	2.3	29.5	10	Dark olive gray	Slight earth	0.0	0.0	2.2	17.8	65.5	14.4	0.1	75.3	2.674	Sand	<5.3	39	64	
			2012/12/05	Sunny	8.7	2.2	9.6	10	Olive black	None	0.0	0.0	0.0	18.9	69.3	11.8	0.0	77.5	2.676	Sand	<4.6	34	59	
			2013/02/20	Sunny	4.0	2.3	7.2	10	Black	None	0.0	0.2	0.0	13.2	76.6	10.0	0.0	74.2	2.658	Sand	<5.2	34	61	
63	Sotonosakauma Lake	Itakoshi City	2012/06/27	Sunny	19.0	1.8	22.2	10	Brownish black	None	0.0	0.0	6.2	30.2	63.3	0.3	0.0	85.3	2.678	Sand	<4.8	41	69	
			2012/09/12	Sunny	29.2	1.7	30.5	10	Grayish olive	Slight earth	0.0	0.0	0.0	31.0	64.1	4.9	0.0	84.8	2.691	Sand	<3.9	40	57	
			2012/12/05	Sunny	10.0	2.1	9.2	10	Olive black	Slight fish and shellfish	0.0	0.0	0.0	32.3	60.9	6.8	0.0	80.5	2.654	Sand	<5.4	35	67	
			2013/02/20	Sunny	6.0	1.9	7.8	10	Olive black	None	0.0	0.0	0.0	35.6	59.9	4.5	0.0	79.4	2.673	Sand	<5.0	30	63	
64	Kisau	Kamisu City	2012/06/27	Sunny	18.5	5.1	23.9	10	Brownish black	None	0.0	0.1	4.5	40.0	50.6	4.5	0.0	84.1	2.703	Sand	<5.2	68	100	
			2012/09/12	Sunny	29.0	5.2	29.8	10	Dark olive gray	Slight earth	0.0	0.0	2.4	55.4	38.0	4.2	0.0	82.9	2.713	Sand	<4.7	60	92	
			2012/12/05	Sunny	10.2	5.4	10.5	10	Black	None	0.0	0.2	10.0	37.0	57.5	5.3	0.0	78.4	2.647	Sand	<4.9	54	100	
			2013/02/20	Sunny	5.8	5.1	7.7	10	Olive black	None	0.0	0.0	0.0	45.6	51.4	3.0	0.0	77.6	2.685	Sand	<4.8	56	86	
65	Ushikunuma Lake	Center of Ushikunuma Lake	2012/06/19	Cloudy	25.5	1.6	24.1	10	Reddish yellowish black	None	0.0	0.0	6.9	20.8	35.0	37.4	0.0	33.5	2.424	Mud	<19	420	670	
			2012/09/13	Sunny	30.6	1.3	27.6	10	Dark grayish greenish yellow	Mud	0.0	0.0	0.0	4.8	46.6	48.5	0.1	38.0	2.416	Mud	<18	450	720	
			2012/12/06	Sunny	13.5	1.4	9.2	5	Reddish yellowish dark gray	Faint sludge	0.0	0.0	0.0	4.2	41.8	53.8	0.2	32.3	2.398	Silt	<19	440	770	
			2013/02/21	Sunny	4.2	1.3	4.9	5	Dark grayish yellow	Faint sludge	0.0	0.0	0.0	3.5	49.1	47.3	0.0	33.7	2.381	Silt/mud	<19	480	820	

Table 4.4.2.3 Ibaraki Pref. Lake and Headwater (Surrounding Environment)

No.	Sampling point			Sampling date	Weather	Air temperature °C	Full depth m	Surrounding Environment (Soil and Air Dose)						Air dose μSv/h	Remarks	
	Point	Municipality	Soil													
			General items					Radioactive material concentrations (Bq/kg (dry))								
			Color					Odor	Property	Radioactive iodine I-131	Radioactive cesium Cs-134	Cs-137				
L a k e s h e a d w a t e r s	54	Hinoura	Ibarakimachi Town	2012/06/06	Cloudy	19.5	2.6	Very dark purplish red	None	Sandy	<4.6	56	87	0.08		
				2012/09/12	Sunny	30.0	2.5	Dark reddish yellow	Earth	Loamy	<5.4	53	82	0.11		
				2012/12/11	Sunny	9.7	3.0	Deep reddish yellow	Earth	Loamy	<5.0	17	29	0.16		
				2013/02/20	Sunny	3.4	2.7	Very dark reddish yellow	Earth	Loamy/skeletal	<3.8	<5.8	11	0.16		
				2012/06/06	Cloudy	19.4	3.1	Dark reddish yellow	None	Sandy/loamy	<5.4	41	68	0.09		
				2012/09/12	Sunny	30.0	2.9	Dark yellow red	Earth	Loamy	<5.1	25	36	0.07		
	55	Hinuma Lake	Miyamae	Ibarakimachi Town	2012/12/11	Sunny	9.5	3.3	Dark reddish yellow	Earth	Loamy	<4.3	21	43	0.07	
					2013/02/20	Sunny	3.2	3.2	Dark reddish yellow	Earth	Loamy/skeletal	<5.7	87	150	0.08	
					2012/06/06	Cloudy	19.4	2.3	-	-	-	-	-	-	-	
					2012/09/12	Sunny	31.0	1.9	-	-	-	-	-	-	-	
					2012/12/11	Sunny	9.2	2.6	-	-	-	-	-	-	-	
					2013/02/20	Sunny	3.1	2.3	-	-	-	-	-	-	-	
56	Hinuma Lake	Oyazawa	Ibarakimachi Town	2012/06/27	Cloudy	22.0	6.9	Greenish yellowish dark gray	Faint earth	Sandy	<4.4	29	42	0.09		
				2012/09/12	Sunny	29.0	6.8	Greenish yellowish dark gray	Faint earth	Sandy	<3.9	10	13	0.07		
				2012/12/05	Sunny	12.2	7.1	Very dark reddish yellow	None	Sandy	<5.2	35	76	0.08		
				2013/02/20	Sunny	8.5	6.9	Greenish yellowish dark gray	Faint grass	Sandy	<5.6	56	120	0.10		
				2012/06/27	Cloudy	20.8	1.7	Dark reddish yellow	Faint earth	Sandy	<8.4	300	420	0.11		
				2012/09/12	Sunny	29.5	1.9	Dark reddish yellow	Earth	Loamy	<4.3	7.1	8.1	0.10		
58	Kasumigaura Lake	Offshore of Kakeura	Animachi Town	2012/12/05	Sunny	9.0	2.1	Dark reddish yellow	None	Sandy	<4.9	49	88	0.12		
				2013/02/20	Sunny	6.4	2.1	Dark reddish yellow	Earth	Sandy	<4.8	46	79	0.11		
				2012/06/27	Sunny	19.0	6.2	-	-	-	-	-	-	-		
				2012/09/12	Sunny	24.3	6.2	-	-	-	-	-	-	-		
				2012/12/05	Sunny	7.1	6.4	-	-	-	-	-	-	-		
				2013/02/20	Sunny	2.0	6.3	-	-	-	-	-	-	-		
59	Kasumigaura Lake	Center of the lake	Mihomura Village	2012/06/27	Cloudy	17.2	1.8	Very dark reddish yellow	Earth	Sandy	<5.0	94	150	0.12		
				2012/09/12	Sunny	24.3	1.7	Greenish yellowish dark gray	Faint earth	Sandy	<5.5	46	81	0.13		
				2012/12/05	Sunny	4.9	1.7	Very dark yellow red	Faint earth	Sandy	<5.5	120	220	0.11		
				2013/02/20	Sunny	0.9	1.8	Very dark reddish yellow	None	Sandy	<4.4	50	76	0.11		
				2012/06/27	Sunny	17.0	6.8	Greenish yellowish dark gray	Earth	Sandy	<7.6	280	430	0.10		
				2012/09/12	Sunny	26.1	6.6	Very dark reddish yellow	Earth	Sandy	<7.4	310	500	0.11		
60	Kitaura Lake	Offshore of Aso	Inushikishi City	2012/12/05	Sunny	8.1	6.9	Very dark yellow red	Faint earth	Loamy/skeletal	<21	1,600	2,800	0.11		
				2013/02/20	Sunny	0.2	6.9	Very dark reddish yellow	Earth	Sandy	<7.5	200	400	0.10		
				2012/06/27	Sunny	17.2	2.4	Very dark reddish yellow	Earth	Loamy	<6.5	120	220	0.06		
				2012/09/12	Sunny	29.3	2.3	Dark reddish yellow	Earth	Sandy	<4.2	17	32	0.06		
				2012/12/05	Sunny	8.7	2.2	Dark reddish yellow	Faint earth	Loamy	<5.3	19	35	0.05		
				2013/02/20	Sunny	4.0	2.3	Dark yellow red	Earth	Loamy/sandy	<4.7	28	56	0.06		
61	Kitaura Lake	Offshore of Kamaya	Namegatahara City	2012/06/27	Sunny	19.0	1.8	Very dark reddish yellow	Earth	Loamy	<6.8	97	150	0.08		
				2012/09/12	Sunny	29.2	1.7	Very dark reddish yellow	Earth	Loamy	<8.9	150	250	0.09		
				2012/12/05	Sunny	10.0	2.1	Very dark yellow red	Faint earth	Loamy	<5.9	77	150	0.08		
				2013/02/20	Sunny	6.0	1.9	Very dark reddish yellow	Earth	Loamy	<6.4	76	130	0.07		
				2012/06/27	Sunny	18.5	5.1	Very dark reddish yellow	Earth	Loamy	<7.7	170	270	0.08		
				2012/09/12	Sunny	29.0	5.2	Dark reddish yellow	Earth	Loamy	<7.9	140	230	0.09		
62	Hitachinonegawa River	Jingubashi Bridge	Itakoshi City	2012/12/05	Sunny	10.2	5.4	Very dark reddish yellow	Earth	Loamy	<6.6	120	220	0.08		
				2013/02/20	Sunny	5.8	5.1	Very dark reddish yellow	Earth	Loamy	<8.9	190	350	0.08		
				2012/06/19	Cloudy	25.3	1.6	Dark yellow red	Earth	Loamy	<9.3	180	300	0.14		
				2012/09/13	Sunny	30.6	1.3	Dark reddish yellow	Earth	Loamy	<6.3	130	190	0.12		
				2012/12/06	Sunny	13.5	1.4	Very dark reddish yellow	Faint earth	Loamy	<5.6	53	92	0.11		
				2013/02/21	Sunny	4.2	1.3	Very dark reddish yellow	Earth	Loamy	<6.5	92	190	0.13		
63	Hitachinonegawa River	Iboku	Kamiasahi City	2012/06/19	Cloudy	25.3	1.6	Dark yellow red	Earth	Loamy	<9.3	180	300	0.14		
				2012/09/13	Sunny	30.6	1.3	Dark reddish yellow	Earth	Loamy	<6.3	130	190	0.12		
				2012/12/06	Sunny	13.5	1.4	Very dark reddish yellow	Faint earth	Loamy	<5.6	53	92	0.11		
				2013/02/21	Sunny	4.2	1.3	Very dark reddish yellow	Earth	Loamy	<6.5	92	190	0.13		
				2012/06/19	Cloudy	25.3	1.6	Dark yellow red	Earth	Loamy	<9.3	180	300	0.14		
				2012/09/13	Sunny	30.6	1.3	Dark reddish yellow	Earth	Loamy	<6.3	130	190	0.12		
64	Ushikumama Lake	Center of Ushikumama Lake	Ryugasaki City	2012/06/19	Cloudy	25.3	1.6	Dark yellow red	Earth	Loamy	<9.3	180	300	0.14		
				2012/09/13	Sunny	30.6	1.3	Dark reddish yellow	Earth	Loamy	<6.3	130	190	0.12		
				2012/12/06	Sunny	13.5	1.4	Very dark reddish yellow	Faint earth	Loamy	<5.6	53	92	0.11		
				2013/02/21	Sunny	4.2	1.3	Very dark reddish yellow	Earth	Loamy	<6.5	92	190	0.13		
				2012/06/19	Cloudy	25.3	1.6	Dark yellow red	Earth	Loamy	<9.3	180	300	0.14		
				2012/09/13	Sunny	30.6	1.3	Dark reddish yellow	Earth	Loamy	<6.3	130	190	0.12		
65	Ushikumama Lake	Center of Ushikumama Lake	Ryugasaki City	2012/06/19	Cloudy	25.3	1.6	Dark yellow red	Earth	Loamy	<9.3	180	300	0.14		
				2012/09/13	Sunny	30.6	1.3	Dark reddish yellow	Earth	Loamy	<6.3	130	190	0.12		
				2012/12/06	Sunny	13.5	1.4	Very dark reddish yellow	Faint earth	Loamy	<5.6	53	92	0.11		
				2013/02/21	Sunny	4.2	1.3	Very dark reddish yellow	Earth	Loamy	<6.5	92	190	0.13		
				2012/06/19	Cloudy	25.3	1.6	Dark yellow red	Earth	Loamy	<9.3	180	300	0.14		
				2012/09/13	Sunny	30.6	1.3	Dark reddish yellow	Earth	Loamy	<6.3	130	190	0.12		

Table 4.4.3.1 Ibaraki Pref. Coastal Area (Water Quality)

No.	Sampling point		Sampling date	Weather	Air temperature °C	Full depth m	Water quality										Remarks
	Water Body	Surface layer/Bottom layer					General items							Radioactive material concentrations (Bq/L)			
							Water temperature °C	Sampling depth m	Color	Odor	Secchi disk depth m	Salinity ‰	SS mg/L	Turbidity	Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137	
66	Offshore of Satonegawa River Estuary	Surface layer	2012/06/30	Sunny	19.8	12.0	19.5	0.5	Very pale greenish yellow	None	4.0	28.3	1.2	4.8	-0.50	-0.48	-0.56
		Bottom layer					19.3	11.0	-	None		28.5	<1	2.3	-0.57	-0.56	-0.60
		Surface layer	2012/10/24	Sunny	19.3	11.6	19.7	0.5	Light grayish yellow green	None	3.0	33.1	6.2	1.4	-0.69	-0.80	-0.58
		Bottom layer					19.5	10.6	-	None		33.2	4.4	1.3	-0.52	-0.56	-0.54
		Surface layer	2012/11/19	Cloudy	9.0	15.0	15.5	0.5	Dark yellowish green	None	3.5	36.9	3.7	1.2	-0.52	-0.53	-0.74
		Bottom layer					16.1	14.0	-	None		37.4	2.8	0.9	-0.70	-0.75	-0.73
		Surface layer	2012/12/25	Sunny	10.2	12.0	12.5	0.5	Light bluish green	None	5.5	35.6	7.8	1.2	-0.48	-0.52	-0.49
		Bottom layer					12.4	11.0	-	None		35.9	5.4	1.0	-0.42	-0.74	-0.65
Surface layer	2013/02/25	Cloudy	4.6	12.0	9.9	0.5	Dark grayish yellow green	None	7.0	31.9	3.6	1.1	-0.48	-0.56	-0.63		
Bottom layer					9.7	11.0	-	None		32.0	6.1	1.0	-0.55	-0.56	-0.57		
67	Offshore of Okitagawa River Estuary	Surface layer	2012/06/30	Sunny	19.8	11.1	19.3	0.5	Very pale greenish yellow	None	4.0	28.2	<1	2.0	-0.66	-0.83	-0.70
		Bottom layer					19.3	10.1	-	None		28.2	<1	7.0	-0.49	-0.58	-0.54
		Surface layer	2012/10/24	Sunny	19.3	13.5	19.9	0.5	Greenish yellowish pale gray	None	4.5	33.6	3.4	1.0	-0.57	-0.77	-0.51
		Bottom layer					18.8	11.2	-	None		33.4	4.5	1.1	-0.61	-0.83	-0.78
		Surface layer	2012/11/19	Cloudy	9.2	14.0	14.5	0.5	Dark yellowish green	None	4.5	35.4	2.9	0.8	-0.43	-0.56	-0.56
		Bottom layer					15.4	13.0	-	None		36.2	3.6	0.5	-0.53	-0.61	-0.60
		Surface layer	2012/12/25	Sunny	10.5	11.7	12.4	0.5	Light bluish green	None	8.5	35.3	2.2	0.5	-0.46	-0.61	-0.48
		Bottom layer					12.1	10.7	-	None		35.7	4.0	0.6	-0.48	-0.58	-0.51
Surface layer	2013/02/25	Cloudy	5.5	11.4	10.3	0.5	Dark grayish bluish green	None	7.0	31.7	4.4	1.1	-0.41	-0.65	-0.56		
Bottom layer					10.6	10.4	-	None		32.0	6.7	1.1	-0.47	-0.58	-0.60		
68	Offshore of Momiyagawa River/Kujigawa River Estuaries	Surface layer	2012/06/29	Sunny	21.1	10.1	20.5	0.5	Strong bluish green	None	3.0	27.7	1.0	2.3	-0.59	-0.64	-0.70
		Bottom layer					18.3	9.1	-	None		29.1	<1	5.5	-0.62	-0.80	-0.66
		Surface layer	2012/07/24	Cloudy	26.0	10.0	20.4	0.5	Grayish bluish green	None	3.5	27.5	2.7	3.1	-0.46	-0.63	-0.56
		Bottom layer					19.0	9.0	-	None		30.7	1.8	3.3	-0.62	-0.75	-0.71
		Surface layer	2012/08/20	Sunny	28.5	9.0	23.8	0.5	Dark yellow green	None	2.5	25.2	3.4	0.9	-0.72	-0.80	-0.60
		Bottom layer					19.5	8.0	-	None		30.5	4.2	1.2	-0.57	-0.64	-0.57
		Surface layer	2012/10/24	Sunny	19.8	9.0	19.6	0.5	Light grayish yellow	None	2.5	29.2	6.2	2.9	-0.56	-0.70	-0.53
		Bottom layer					19.6	8.0	-	None		27.8	5.5	1.9	-0.44	-0.56	-0.56
		Surface layer	2012/11/19	Cloudy	10.5	12.0	16.9	0.5	Dark yellowish green	None	4.0	37.6	5.7	1.1	-0.51	-0.70	-0.57
		Bottom layer					17.5	11.0	-	None		37.8	5.4	1.1	-0.46	-0.56	-0.42
		Surface layer	2012/12/25	Sunny	9.4	9.3	9.4	0.5	Light bluish green	None	5.0	20.0	3.5	1.5	-0.54	-0.64	-0.65
		Bottom layer					12.5	8.3	-	None		34.9	5.7	2.1	-0.59	-0.66	-0.73
Surface layer	2013/02/25	Sunny	5.9	9.9	9.8	0.5	Dark grayish green	None	3.5	30.1	6.3	1.7	-0.55	-0.56	-0.56		
Bottom layer					10.7	8.9	-	None		32.2	8.0	2.1	-0.46	-0.61	-0.63		
69	Neighboring water body of Ken-o Offshore of Nakagawa River	Surface layer	2012/06/29	Cloudy, then sunny	23.0	5.7	19.6	0.5	Strong bluish green	None	3.0	23.1	1.0	3.6	-0.48	-0.63	-0.60
		Bottom layer					18.8	4.7	-	None		28.7	<1	4.2	-0.44	-0.66	-0.63
		Surface layer	2012/07/24	Sunny	25.0	5.3	22.1	0.5	Light grayish bluish green	None	2.0	12.0	2.5	2.0	-0.51	-0.61	-0.60
		Bottom layer					20.0	4.3	-	None		27.8	9.3	3.7	-0.62	-0.66	-0.48
		Surface layer	2012/08/20	Sunny	29.0	5.7	24.1	0.5	Dark yellow green	None	1.5	18.1	5.2	3.3	-0.50	-0.61	-0.56
		Bottom layer					22.2	4.7	-	None		26.6	4.8	2.6	-0.72	-0.72	-0.71
		Surface layer	2012/10/24	Sunny	18.1	6.3	19.3	0.5	Grayish greenish yellow	None	2.0	19.3	5.3	2.6	-0.65	-0.78	-0.75
		Bottom layer					19.0	5.3	-	None		31.5	6.1	1.6	-0.49	-0.61	-0.63
		Surface layer	2012/11/19	Cloudy	10.4	8.0	15.9	0.5	Dark yellow green	None	2.0	32.6	4.1	1.5	-0.50	-0.83	-0.66
		Bottom layer					16.7	7.0	-	None		37.1	3.0	0.7	-0.65	-0.73	-0.70
		Surface layer	2012/12/25	Sunny	7.7	6.6	11.6	0.5	Light grayish reddish yellow	None	4.0	28.6	6.5	2.9	-0.48	-0.63	-0.70
		Bottom layer					12.8	5.4	-	None		34.1	9.7	3.7	-0.55	-0.68	-0.59
Surface layer	2013/02/25	Sunny	2.3	5.4	8.1	0.5	Dark grayish green	None	4.0	20.7	4.3	1.8	-0.57	-0.74	-0.55		
Bottom layer					10.6	4.4	-	None		31.7	9.3	1.7	-0.41	-0.70	-0.60		

C o a s t a l a r e a s

Table 4.4.3.1 Ibaraki Pref. Coastal Area (Water Quality)

	Sampling point			Sampling date	Weather	Air temperature °C	Full depth m	Water quality										Remarks
	No.	Water Body	Surface layer/Bottom layer					General items						Radioactive material concentrations (Bq/L)				
								Water temperature °C	Sampling depth m	Color	Odor	Secchi disk depth m	Salinity ‰	SS mg/L	Turbidity	Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137	
C o a s t a l s e a a r e a	70	Offshore of Tonegawa River Estuary	Surface layer	2012/07/11	Sunny	29.4	8.7	24.0	0.5	Deep yellow green	None	0.7	12.4	1.0	3.1	<0.50	<0.67	<0.49
			Bottom layer					19.8	7.7	-	None		29.9	2.0	2.8	<0.57	<0.78	<0.81
			Surface layer	2012/07/31	Sunny	29.6	8.0	24.0	0.5	colorless transparent	None	2.0	25.1	1.3	3.1	<0.44	<0.67	<0.56
			Bottom layer					18.1	7.0	-	None		30.6	3.5	10	<0.62	<0.72	<0.70
			Surface layer	2012/08/21	Sunny	34.0	7.9	28.2	0.5	Greenish yellowish light gray	None	1.0	11.8	4.6	2.6	<0.57	<0.72	<0.53
			Bottom layer					20.7	6.9	-	None		29.2	7.0	1.7	<0.46	<0.63	<0.56
			Surface layer	2012/10/22	Sunny	24.0	9.2	21.1	0.5	Deep blue green	None	2.5	22.0	4.1	1.8	<0.47	<0.61	<0.63
			Bottom layer					20.7	8.2	-	None		31.3	5.2	1.4	<0.60	<0.83	<0.71
			Surface layer	2012/11/26	Rain	16.0	9.5	14.7	0.5	Dark yellow green	None	6.0	28.7	4.0	1.3	<0.42	<0.65	<0.59
			Bottom layer					16.2	8.5	-	None		37.5	7.8	1.2	<0.54	<0.66	<0.55
			Surface layer	2012/12/27	Sunny	10.2	7.2	11.6	0.5	Deep green	None	4.0	33.4	6.4	1.8	<0.51	<0.60	<0.53
			Bottom layer					12.0	6.2	-	None		35.2	8.2	1.8	<0.56	<0.61	<0.59
			Surface layer	2013/03/08	Sunny	16.9	8.5	12.2	0.5	Dark greenish yellow	None	3.0	19.3	6.6	3.4	<0.55	<0.63	<0.54
			Bottom layer					12.0	7.5	-	None		29.6	8.0	0.9	<0.65	<0.83	<0.68

Table 4.4.3.2 Ibaraki Pref. Coastal Area (Sediment)

C o a s t a l s e a r e a s	Sampling point		Sampling date	Weather	Air temperature °C	Full depth m	Sediment																Remarks
	No.	Water Body					General items										Concentration of radioactive material (Bq/kg dried mud)						
							Mud temperature °C	Mud sampling depth cm	Color	Odor	Mechanical composition %					Mud content %	Density g/cm ³	Property	Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137			
66	Offshore of Satonegawa River Estuary	2012/06/30	Sunny	19.8	12.0	17.8	5	Yellowish light gray	None	0.0	0.0	0.0	19.9	73.0	7.1	0.0	84.9	2.698	Sand	<5.6	23	30	
		2012/10/24	Sunny	19.3	11.6	19.5	5	Dark grayish yellow	None	0.0	0.0	0.0	20.8	71.7	7.5	0.0	86.6	2.673	Sand	<4.2	20	32	
		2012/11/19	Cloudy	9.0	15.0	15.8	10	Yellowish black	None	0.0	0.6	12.3	55.4	30.7	1.0	0.0	89.8	2.767	Sand	<3.9	6.1	8.2	
		2012/12/25	Sunny	10.2	12.0	11.1	15	Dark grayish yellow	None	0.0	0.0	6.0	19.5	69.1	5.4	0.0	84.8	2.715	Sand	<4.6	13	16	
		2013/02/25	Cloudy	4.6	12.0	10.0	5	Dark grayish yellow green	None	0.0	0.5	15.4	53.4	29.6	1.0	0.0	91.9	2.739	Sand	<3.8	<6.4	9.2	
	67	Offshore of Okitagawa River Estuary	2012/06/30	Sunny	19.8	11.1	16.5	5	Greenish yellowish light gray	None	0.0	0.0	0.0	20.7	73.9	5.4	0.0	84.5	2.726	Sand	<5.7	23	30
			2012/10/24	Sunny	19.3	13.5	18.8	3	Dark grayish reddish yellow	None	0.0	0.0	0.0	5.5	84.7	9.9	0.0	83.0	2.709	Sand	<4.8	9.7	18
			2012/11/19	Cloudy	9.2	14.0	15.6	10	Dark grayish yellow	None	0.0	0.0	0.0	18.2	69.6	12.1	0.0	84.1	2.649	Sand	<4.7	7.6	17
			2012/12/25	Sunny	10.5	11.7	11.0	15	Dark grayish yellow	None	0.0	0.0	8.9	18.7	67.7	4.8	0.0	81.8	2.774	Sand	<4.4	14	16
			2013/02/25	Cloudy	5.5	11.4	7.8	3	Dark grayish yellow green	None	0.0	0.0	3.5	15.5	72.9	8.1	0.0	90.4	2.756	Sand	<4.3	12	22
	68	Offshore of Momiyagawa River/Kajigawa River Estuaries	2012/06/29	Sunny	21.1	10.1	18.2	5	Yellow reddish light gray	None	0.0	0.0	7.2	23.7	49.5	19.7	0.0	78.2	2.614	Sand	<4.8	25	39
			2012/07/24	Cloudy	26.0	10.0	19.0	3	Very dark yellow	None	0.0	0.0	0.0	12.0	64.8	23.3	0.0	78.4	2.622	Sand	<4.8	24	36
			2012/08/20	Sunny	28.5	9.0	20.7	5	Yellowish dark gray	None	0.0	0.0	0.0	14.5	62.5	23.0	0.0	78.1	2.7	Sand	<4.6	28	41
			2012/10/24	Sunny	19.8	9.0	19.9	5	Dark grayish reddish yellow	None	0.0	0.0	0.0	17.1	73.6	9.3	0.0	82.5	2.772	Sand	<3.6	15	17
			2012/11/19	Cloudy	10.5	12.0	17.8	10	Yellowish black	None	0.0	0.0	0.0	13.0	72.6	14.3	0.0	82.7	2.689	Sand	<4.6	6.3	12
			2012/12/25	Sunny	9.4	9.3	13.2	5	Dark grayish yellow	None	0.0	0.0	10.0	21.4	59.6	9.0	0.0	82.9	2.686	Sand	<3.9	<6.9	14
	69	Neighboring water body of Keno Offshore of Nakagawa River	2013/02/25	Sunny	9.9	9.9	10.3	3	Dark grayish yellow green	None	0.0	0.0	0.0	9.2	65.4	25.3	0.0	77.9	2.678	Silt	<4.7	14	35
			2012/06/29	Cloudy, then sunny	23.0	5.7	17.9	5	Yellowish light gray	None	0.0	0.0	5.0	67.5	27.0	0.5	0.0	89.9	2.705	Sand	<3.7	<5.5	9.5
			2012/07/24	Sunny	25.0	5.3	21.4	3	Yellow greenish black	None	0.0	0.2	5.3	79.7	14.6	0.2	0.0	93.9	2.733	Sand	<4.1	<6.2	<5.0
			2012/08/20	Sunny	29.0	5.7	20.0	5	Yellowish dark gray	None	0.0	1.2	7.3	74.1	16.9	0.5	0.0	93.0	2.731	Sand	<4.8	<6.6	<5.9
			2012/10/24	Sunny	18.1	6.5	20.5	5	Dark grayish reddish yellow	None	1.4	4.6	6.4	64.6	22.4	0.6	0.0	94.1	2.715	Sand	<3.6	<5.4	5.5
2012/11/19			Cloudy	10.4	8.0	17.1	10	Yellow greenish black	None	0.0	2.7	3.9	71.0	22.1	0.3	0.0	93.8	2.71	Sand	<3.1	<5.6	<3.8	
2012/12/25			Sunny	7.7	6.6	12.9	15	Yellowish dark gray	None	4.4	20.1	35.7	36.9	2.9	0.0	0.0	95.1	2.743	Gravel/sand	<4.2	<6.5	<4.6	
70	Offshore of Tonegawa River Estuary	2013/02/25	Sunny	2.3	5.4	10.3	3	Yellow greenish dark gray	None	0.0	0.0	6.6	82.8	10.6	0.0	0.0	92.6	2.762	Sand	<4.1	<5.5	<4.4	
		2012/07/11	Sunny	29.4	8.7	20.9	3	Dark grayish reddish yellow	None	0.0	0.0	0.0	16.6	70.8	12.6	0.0	78.4	2.686	Sand	<3.7	9.9	17	
		2012/07/31	Sunny	29.6	8.0	20.8	15	Very dark yellow green	Seaweed	0.0	0.0	0.0	15.5	75.8	8.7	0.0	79.5	2.685	Sand	<5.0	13	12	
		2012/08/21	Sunny	34.0	7.9	23.5	5	Yellowish black	None	0.0	0.0	0.0	17.0	69.2	13.8	0.0	84.5	2.637	Sand	<3.9	<6.2	5.3	
		2012/10/22	Sunny	24.0	9.2	19.1	3	Yellow reddish black	None	0.0	0.0	0.0	18.9	75.4	5.7	0.0	84.0	2.684	Sand	<4.6	<6.3	6.7	
		2012/11/26	Rain	16.0	9.5	16.2	3	Dark grayish yellow	None	0.0	1.1	0.4	26.4	69.0	3.1	0.0	76.1	2.694	Sand	<3.9	<5.3	<3.9	
		2012/12/27	Sunny	10.2	7.2	11.5	3	Reddish yellowish dark gray	None	0.0	0.0	0.0	18.8	79.7	1.5	0.0	86.2	2.726	Sand	<3.9	<5.1	6.5	
		2013/03/08	Sunny	16.9	8.5	13.5	1	Dark grayish yellow	None	0.0	0.0	0.0	17.5	81.4	1.3	0.0	83.8	2.67	Sand	<3.8	<6.1	<3.9	



Survey Locations (Ibaraki Prefecture)