

## FY2012 Tokyo 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 at any location

### Sediment

#### Rivers

Cs-134: 58-250Bq/kg (dried mud)

Cs-137: 73-420Bq/kg (dried mud)

#### Coasts

Cs-134: ND-280Bq/kg (dry)

Cs-137: 9-500Bq/kg (dry)

### Surrounding Environment

#### (1) Soil

##### Rivers

Cs-134: 130-670Bq/kg (dry)

Cs-137: 240-1,200Bq/kg (dry)

#### (2) Spatial dose

Rivers 0.04-0.12 $\mu$ Sv/h

Table 4.9.1.1 Tokyo Pref. River (Water Quality)

R i v e r s	Sampling point				Sampling date	Weather	Air temperature ℃	Full depth m	Water quality										Remarks	
	No.	Water Body	Point	Municipality					General items						Radioactive material concentrations (Bq/L)					
									Water temperature ℃	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		
50	A r k a w a	Arakawa River Lower Reaches	Kasabashi Bridge	Koto City/Edogawa City	2012/06/11	Cloudy	24.0	1.4	22.3	0.0	Grayish yellow	None	10	560	32	16	-0.48	-0.80	-0.87	
					2012/07/13	Cloudy	27.0	1.4	26.2	0.0	Grayish greenish yellow	None	48	408	4.9	1.8	-0.47	-0.61	-0.63	
					2012/08/10	Sunny	32.0	2.5	29.1	0.0	Dark grayish yellow green	None	52	1,346	<1	2.2	-0.54	-0.86	-0.49	
					2012/09/11	Sunny	30.0	1.0	28.1	0.0	Grayish greenish yellow	Sewage	45	704	6.3	5.3	-0.66	-0.63	-0.54	
					2012/11/12	Sunny	18.1	2.5	17.9	0.0	Dark grayish yellow green	Faint seaweed	72	3,990	6.9	2.8	-0.63	-0.94	-0.78	
	51	S y s t e m	Sumidagawa River	Ryogokubashi Bridge	Chuo City	2013/01/24	Sunny	8.8	2.5	10.1	0.0	Dark grayish greenish yellow	None	32	3,190	13	11	-0.59	-0.78	-0.86
						2012/06/11	Cloudy	23.8	2.4	22.6	0.0	Dark grayish yellow green	Faint sewage	95	729	<1	1.0	-0.54	-0.74	-0.62
						2012/07/13	Cloudy	31.0	3.0	26.2	0.0	Dark grayish yellow green	Faint sewage	73	558	3.8	1.6	-0.60	-0.53	-0.57
						2012/09/21	Cloudy	32.0	3.5	27.5	0.0	Grayish yellow	None	62	2,680	2.9	2.2	-0.60	-0.60	-0.68
						2012/10/12	Sunny	25.0	3.0	22.8	0.0	Greenish yellowish light gray	None	>100	2,770	4.3	3.1	-0.64	-0.80	-0.70
2012/11/13	Sunny	19.9	3.8	18.5	0.0	Grayish yellow green	Faint seaweed	86	1,696	5.8	2.8	-0.65	-0.78	-0.62						
2013/01/24	Sunny	7.0	3.0	11.3	0.0	Dark grayish yellow	None	>100	3,160	3.8	2.2	-0.49	-0.61	-0.60						

Table 4.9.1.2 Tokyo Pref. River (Sediment)

R i v e r s	Sampling point				Sampling date	Weather	Air temperature °C	Full depth m	Sediment														Remarks				
	No.	Water Body		Point					Municipality	General items											Radioactive material concentrations (Bq/kg dried mud)						
										Mud temperature °C	Mud sampling depth cm	Color	Odor	Mechanical composition %							Mud content %	Density g/cm <sup>3</sup>		Property	Radioactive iodine I-131	Radioactive cesium	
														Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay						Cs-134	Cs-137
50	A r a k a w a  R i v e r	Arakawa River Lower Reach		Kasibashi Bridge	Koto City/Edogawa City	2012/06/11	Cloudy	24.0	1.4	22.3	5	Greenish yellowish black	Sludge	1.0	0.6	0.0	2.9	23.0	70.1	2.4	50.3	2.587	Silt	<7.2	58	73	
						2012/07/13	Cloudy	27.0	1.4	25.6	6	Greenish yellowish dark gray	Sludge	0.9	1.3	0.0	1.2	17.8	74.1	4.8	51.8	2.392	Silt	<9.8	200	320	
						2012/08/10	Sunny	32.0	2.5	28.7	3	Greenish yellowish black	Sludge	4.0	1.7	0.0	2.4	20.2	68.4	3.3	50.8	2.605	Mud	<11	77	140	
						2012/09/11	Sunny	30.0	1.0	27.9	3	Yellow reddish black	Sludge	3.4	4.4	0.0	1.8	18.2	70.0	2.2	54.2	2.607	Silt	<8.2	110	170	
						2012/11/12	Sunny	18.1	2.5	18.1	4	Yellow reddish black	None	26.9	0.6	0.0	13.5	34.3	24.5	0.1	52.1	2.6	Silt	<8.6	110	190	
						2013/01/24	Sunny	8.8	2.5	9.9	5	Greenish yellowish black	Faint sludge	0.0	0.0	0.0	2.9	30.6	63.4	3.1	53.9	2.64	Silt	<8.5	65	110	
51	S y s t e m	Sumidagawa River		Ryogukubashi Bridge	Chao City	2012/06/11	Cloudy	23.8	2.4	22.1	5	Yellow greenish black	Sludge	0.1	2.5	0.0	31.9	25.7	39.0	0.8	64.5	2.65	Silt	<6.3	100	160	
						2012/07/13	Cloudy	31.0	3.9	24.4	4	Yellow greenish black	Sludge	0.0	0.0	0.0	3.6	13.8	72.6	10.0	61.1	2.65	Silt	<7.8	140	230	
						2012/09/21	Cloudy	32.0	3.5	27.2	3	Yellowish reddish black	Sludge	0.3	1.5	0.0	3.9	18.7	68.7	7.0	60.1	2.652	Silt	<8.3	110	190	
						2012/10/12	Sunny	25.0	3.0	22.3	5	Yellowish black	Sludge	3.2	5.5	0.0	0.2	10.9	75.6	2.6	57.2	2.604	Silt	<8.4	180	290	
						2012/11/13	Sunny	19.9	3.8	18.9	5	Reddish yellowish black	Sulfur	0.7	1.8	0.0	2.2	20.4	73.6	1.3	58.2	2.607	Silt	<9.4	250	420	
						2013/01/24	Sunny	7.0	3.0	10.0	5	Reddish yellowish black	Seaweed	0.0	0.0	0.0	19.6	38.5	41.2	0.7	63.0	2.673	Sand/silt	<7.5	110	200	

Table 4.9.1.3 Tokyo Pref. River (Surrounding Environment)

R i v e r s	Sampling point				Sampling date	Weather	Air temperature °C	Surrounding Environment (Soil and Air dose)											Remarks					
	No.	Water Body	Point	Municipality				Left bank					Right bank											
								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 iodine I-131	Radioactive cesium		Color	Odor	Property	Radioactive iodine I-131	Radioactive cesium														
				Cs-134	Cs-137					Cs-134	Cs-137													
50	A r a k a w a  R i v e r	Arakawa River Lower Branch	Kasibashi Bridge	Koto City/Edogawa City	2012/06/11	Cloudy	24.0	Very dark reddish yellow	Earth	Loamy	<13	470	740	0.12	Very dark yellow	Earth	Loamy	<7.4	170	270	0.10			
					2012/07/13	Cloudy	27.0	Very dark yellow red	Earth	Loamy	<8.9	300	470	0.12	Very dark yellow	Earth	Loamy	<5.9	150	240	0.12			
					2012/08/10	Sunny	32.0	Dull reddish yellow	Grass	Loamy/sandy	<8.7	320	510	0.11	Very dark reddish yellow	Earth	Loamy	<11	310	490	0.10			
					2012/09/11	Sunny	30.0	Dark yellow red	Earth	Loamy	<9.6	450	720	0.11	Dark yellow red	Earth	Loamy	<8.6	160	260	0.11			
					2012/11/12	Sunny	18.1	Very dark yellow red	Earth	Loamy/skeletal	<12	420	750	0.11	Very dark yellow red	Earth	Loamy	<7.3	160	270	0.11			
2013/01/24	Sunny	8.8	Very dark reddish yellow	Earth	Loamy	<14	670	1,200	0.11	Very dark yellow red	Earth	Loamy	<6.9	130	240	0.10								
51	S y s t e m	Sumidgawa River	Ryogokubashi Bridge	Chuo City	2012/06/11	Cloudy	23.8	-	-	-	-	-	-	0.06	-	-	-	-	-	-	0.06			
					2012/07/13	Cloudy	31.0	-	-	-	-	-	-	-	-	-	0.06	-	-	-	-	-	0.07	
					2012/09/21	Cloudy	32.0	-	-	-	-	-	-	-	-	-	0.07	-	-	-	-	-	0.05	
					2012/10/12	Sunny	25.0	-	-	-	-	-	-	-	-	-	0.06	-	-	-	-	-	0.06	
					2012/11/13	Sunny	19.9	-	-	-	-	-	-	-	-	-	0.04	-	-	-	-	-	0.06	
					2013/01/24	Sunny	7.0	-	-	-	-	-	-	-	-	-	0.06	-	-	-	-	-	0.09	Soil not exposed

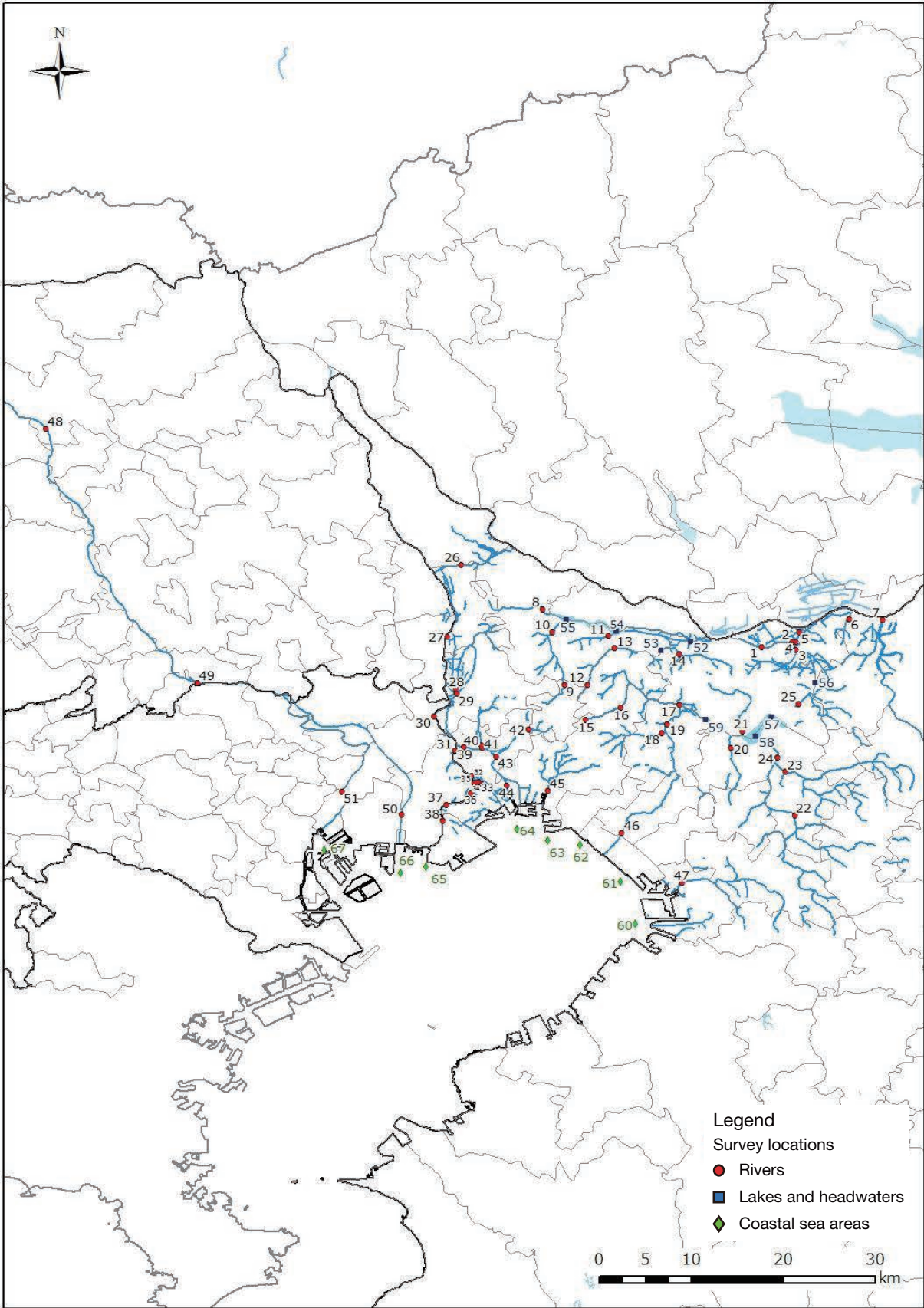
Table 4.9.2.1 Tokyo Pref. Coastal Area (Water Quality)

Sampling point			Sampling date	Weather	Air temperature °C	Full depth m	Water quality										Remarks				
							General items						Radioactive material concentrations (Bq/L) *								
No.	Water Body	Surface layer/bottom layer					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				
65	Approx. 1 km offshore of Kyuodogawa River Estuary	Offshore of Kyuodogawa River Estuary	Surface layer	2012/10/18	Rain	21.0	8.0	21.1	0.5	colorless transparent	None	1.5	39.4	5.3	4.1	-0.63	-0.75	-0.68			
			Bottom layer					21.4	7.0	-	None		38.9	11	7.6	-0.46	-0.63	-0.57			
			Surface layer	2012/12/13	Sunny	10.7	8.2	12.2	0.5	Dark grayish yellow green	None	2.2	27.6	7.4	2.0	-0.49	-0.67	-0.56			
			Bottom layer					13.1	7.2	-	None		26.6	4.8	2.3	-0.48	-0.67	-0.63			
			Surface layer	2013/02/18	Rain	1.5	10.7	8.6	0.5	Yellow greenish dark gray	None	2.7	30.2	6.9	3.3	-0.46	-0.67	-0.59			
			Bottom layer					10.0	9.7	-	None		32.5	8.7	3.8	-0.51	-0.63	-0.80			
			66	St-8	Offshore of Arakawa River/Kyuodogawa River Estuaries	Surface layer	2012/05/31	Cloudy	23.8	5.6	22.5	0.5	Dark grayish yellow	None	0.8	16.3	2.8	2.3	-0.54	-0.61	-0.57
						Bottom layer					20.3	4.6	-	None		28.0	12	3.9	-0.65	-0.78	-0.76
Surface layer	2012/06/27	Sunny				26.0	5.8	23.4	1.0	Dark grayish greenish yellow	None	0.2	10.8	5.1	5.3	-0.62	-0.80	-0.51			
Bottom layer								20.7	4.8	-	None		27.6	19	6.0	-0.56	-0.65	-0.61			
Surface layer	2012/07/19	Sunny				36.0	5.3	28.8	1.0	Dark grayish greenish yellow	None	0.5	11.4	6.5	2.1	-0.68	-0.83	-0.88			
Bottom layer								25.3	4.1	-	None		25.0	16	2.5	-0.62	-0.75	-0.70			
Surface layer	2012/08/23	Sunny				30.0	5.1	30.2	1.0	Grayish yellow	None	0.7	19.7	5.3	4.1	-0.44	-0.72	-0.59			
Bottom layer								29.7	4.1	-	None		19.8	12	5.1	-0.63	-0.72	-0.68			
Surface layer	2012/09/20	Sunny				33.0	5.5	28.4	0.5	Yellowish white	None	1.5	19.8	4.7	2.1	-0.65	-0.66	-0.68			
Bottom layer								28.6	4.5	-	None		20.2	5.4	3.0	-0.49	-0.51	-0.60			
Surface layer	2012/10/18	Rain				19.7	5.3	21.0	0.5	colorless transparent	None	1.2	24.3	4.6	2.1	-0.51	-0.61	-0.55			
Bottom layer								21.5	4.3	-	None		30.4	6.2	2.3	-0.46	-0.53	-0.47			
Surface layer	2012/12/13	Sunny				10.0	5.3	13.1	0.5	Dark grayish yellow green	None	1.8	34.7	17	8.9	-0.65	-0.80	-0.56			
Bottom layer								13.6	4.3	-	None		36.0	15	6.0	-0.48	-0.58	-0.54			
Surface layer	2013/02/18	Rain				1.9	5.9	7.8	0.5	Greenish dark gray	None	2.3	25.4	6.6	3.5	-0.54	-0.67	-0.73			
Bottom layer								9.0	4.9	-	None		29.9	7.7	3.6	-0.56	-0.79	-0.58			
67	Southwestern area of Toyosu Wharf	Offshore of Sumidogawa River Estuary	Surface layer	2012/05/31	Sunny	24.8	11.1	23.0	0.5	Dark grayish yellow	None	1.3	18.5	2.1	1.4	-0.46	-0.76	-0.55			
			Bottom layer					19.5	10.1	-	None		27.5	2.2	2.3	-0.77	-0.78	-0.66			
			Surface layer	2012/06/27	Sunny	29.4	11.3	23.5	0.5	Light grayish yellow	None	1.4	16.3	3.6	2.8	-0.48	-0.63	-0.60			
			Bottom layer					19.7	10.3	-	None		30.5	9.7	6.8	-0.36	-0.64	-0.57			
			Surface layer	2012/07/19	Sunny	35.0	11.1	28.0	1.0	Light grayish greenish yellow	None	0.7	16.0	2.8	2.3	-0.51	-0.53	-0.62			
			Bottom layer					22.6	10.1	-	None		25.7	3.4	2.0	-0.54	-0.68	-0.69			
			Surface layer	2012/08/23	Sunny	31.0	11.0	30.2	1.0	Grayish yellow	None	2.0	20.5	4.7	4.6	-0.64	-0.78	-0.68			
			Bottom layer					26.5	10.0	-	None		27.0	5.0	2.8	-0.59	-0.66	-0.59			
			Surface layer	2012/09/20	Sunny	32.0	11.1	29.0	0.5	Yellowish white	None	1.6	17.2	2.9	1.6	-0.48	-0.69	-0.63			
			Bottom layer					26.5	10.1	-	None		27.0	4.3	2.4	-0.55	-0.59	-0.49			
			Surface layer	2012/10/18	Rain	19.1	10.8	21.4	0.5	colorless transparent	None	2.3	36.4	3.2	2.1	-0.55	-0.53	-0.60			
			Bottom layer					21.2	9.8	-	None		29.2	2.7	2.2	-0.65	-0.72	-0.62			
			Surface layer	2012/12/13	Sunny	9.0	10.7	13.2	0.5	Dark grayish yellow green	None	2.8	32.5	3.6	1.3	-0.66	-0.78	-0.62			
			Bottom layer					13.6	9.7	-	None		35.2	4.5	2.3	-0.46	-0.67	-0.63			
			Surface layer	2013/02/18	Rain	2.5	10.7	9.0	0.5	Dark grayish blue green	None	2.7	29.0	8.3	3.7	-0.46	-0.59	-0.60			
			Bottom layer					9.6	9.7	-	None		31.0	7.8	2.9	-0.53	-0.66	-0.57			

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Table 4.9.2.2 Tokyo Pref. Coastal Area (Sediment)

C o a s t a l  a r e a s	Sampling point			Sampling date	Weather	Air temperature °C	Full depth m	Sediment															Remarks	
	No.	Water Body						General items										Radioactive material concentrations (Bq/kg dried mud)						
								Mud temperature °C	Mud sampling depth cm	Color	Odor	Mechanical composition %							Mud content %	Density g/cm3	Property	Radioactive iodine I-131		Radioactive cesium
Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay	Radioactive cesium Cs-134	Cs-137																
65	Approx. 1 km offshore of Kyuedogawa River Estuary	Offshore of Kyuedogawa River Estuary	2012/10/18	Rain	21.0	8.0	21.2	10	Yellow greenish black	Sludge	0.0	0.0	0.0	21.7	44.8	33.1	0.4	64.1	2.684	Silt	<7.3	140	240	
			2012/12/13	Sunny	10.7	8.2	14.4	7	Greenish yellowish black	Sludge	0.0	0.0	0.0	0.9	24.2	73.3	1.6	47.5	2.587	Silt	<13	280	500	
			2013/02/18	Rain	1.5	10.7	10.0	10	Greenish yellowish dark gray	Sludge	0.0	0.0	0.0	1.9	24.7	72.5	1.0	41.7	2.578	Silt	<13	240	470	
	66	St-8	Offshore of Arakawa River/Kyuedogawa River Estuaries	2012/05/31	Cloudy	23.8	5.6	20.6	10	Reddish yellowish light gray	Faint sludge	0.0	0.0	0.0	0.5	15.7	81.2	2.7	54.0	2.56	Silt	<9.4	190	300
				2012/06/27	Sunny	26.0	5.8	22.3	20	Reddish yellowish dark gray	Sludge	0.0	0.0	0.0	0.2	16.5	81.5	1.8	58.1	2.584	Silt	<8.9	160	280
				2012/07/19	Sunny	36.0	5.1	26.0	20	Yellow greenish pale gray	Sludge	0.0	0.0	0.0	0.3	12.5	76.1	11.0	57.2	2.568	Silt	<9.1	140	240
				2012/08/23	Sunny	30.0	5.1	27.0	5	Yellow greenish black	Sludge	0.0	0.0	0.0	0.3	18.9	79.9	0.9	59.2	2.593	Silt	<7.9	150	250
				2012/09/20	Sunny	33.0	5.5	27.7	5	Greenish yellowish black	Faint sludge	0.0	0.0	0.0	0.4	16.1	82.7	0.9	56.9	2.585	Silt	<8.6	170	270
				2012/10/18	Rain	19.7	5.3	21.3	10	Yellow greenish black	Sludge	0.0	0.0	0.0	0.1	11.5	87.1	1.3	59.6	2.629	Silt	<8.2	170	250
2012/12/13				Sunny	10.0	5.3	12.4	3	Greenish yellowish black	Sludge	0.0	0.0	0.0	0.9	25.3	72.9	1.0	51.3	2.631	Silt	<8.4	110	210	
2013/02/18				Rain	1.9	5.9	10.3	8	Dark grayish greenish yellow	Sludge	0.0	0.0	0.0	1.1	27.8	70.5	0.6	53.5	2.621	Silt	<8.9	150	260	
67				Southwestern area of Toyosu Wharf	Offshore of Sumidagawa River Estuary	2012/05/31	Sunny	24.8	11.1	16.8	10	Greenish yellowish light gray	Sludge	0.0	0.0	0.0	0.5	16.8	77.3	5.4	41.5	2.566	Silt	<4.7
	2012/06/27	Sunny	29.4			11.3	21.2	20	Yellowish light gray	Sludge	0.0	0.1	0.0	0.4	16.5	79.4	3.6	42.0	2.558	Silt	<6.7	<8.8	11	
	2012/07/19	Sunny	35.0			11.1	23.4	20	Reddish yellowish dark gray	Sludge	0.0	0.0	0.0	0.4	13.6	80.1	5.9	42.4	2.549	Silt	<3.9	<5.6	9.3	
	2012/08/23	Sunny	31.0			11.0	21.7	6	Yellowish black	Sludge	0.0	0.0	0.0	1.2	18.2	75.7	5.0	43.7	2.54	Silt	<4.6	11	18	
	2012/09/20	Sunny	32.0			11.1	23.6	5	Yellowish dark gray	Sludge	0.0	0.1	0.0	1.5	20.1	76.6	1.8	42.5	2.559	Silt	<3.7	7.3	9	
	2012/10/18	Rain	19.1			10.8	21.0	10	Yellow greenish black	Sludge	0.0	0.0	0.0	1.1	18.4	74.7	5.9	45.8	2.578	Silt	<3.7	28	44	
	2012/12/13	Sunny	9.0			10.7	16.2	11	Yellow greenish black	Sludge	0.0	0.0	0.0	0.5	21.0	75.1	3.3	40.1	2.606	Silt	<9.9	20	29	
	2013/02/18	Rain	2.5			10.7	10.0	3	Yellowish black	Sludge	0.0	0.0	11.3	13.1	21.6	52.8	1.2	40.1	2.587	Silt	<11	41	85	



Survey Locations (Chiba, Saitama and Tokyo Prefectures)