○Results of Radioactive Material Monitoring of Aquatic Organisms (Location C along the Uda River)

＜Location C along the Uda River: Samples collected＞

Items	General items		Radioactive materials			
Locations	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
C－1	○	○	○	－	○	－
C－2	○	○	○	－	○	－
C－3	○	－	○	－	－	－
C－4	○	○	○	○	○	○
C－5	○	○	○	－	○	－
C－6	○	○	○	－	○	－

＜Location C along the Uda River: Site measurement item＞

Items	Latitude and longitude of the location		Survey date and time			Water	Sediment				Other	
Locations	Scheduled latitude	Scheduled longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Contaminants	Water depth (m)	Transparency (cm)
C－1	37.7953°	140.7459°	2015/6/20	7:57	8:05	16.6	16.9	Sediment with sand	2.5Y3/2	Pebbles	0.3	>50
C－2	37.7718°	140.7290°		8:58	9:08	18.5	17.7	Sediment	2.5Y2/1	Plant pieces a little	0.31	>50
C－3	37.7792°	140.8040°		9:55	－	18.3	－	－	－	－	0.3	>50
C－4	37.7687°	140.8443°		10:45	11:02	19.2	19.3	Sand	2.5Y4/4	None	0.16	>50
C－5	37.7646°	140.8603°		11:46	12:01	20.4	19.9	Sediment with sand	2.5Y4/1	Plant	0.42	>50
C－6	37.7764°	140.8877°		13:07	13:13	19.4	19.4	Sand	2.5Y3/2	Pebbles	0.37	>50

＜Location C along the Udagawa River:General survey items/Analysis of radioactive materials Water＞

Items	Latitude and longitude of the location		Survey date and time		pH	BOD	COD	DO	Electrical conductivity	Salinity	TOC	SS	Turbidity	Cs-134	Cs-137	Sr-90
Locations	Scheduled latitude	Scheduled longitude	Date	Time (water)		(mg/L)	(mg/L)	(mg/L)			(mg/L)	(mg/L)	(FNU)	(Bq/L)	(Bq/L)	(Bq/L)
C－1	37.7953°	140.7459°	2015/6/20	7:57	7.5	<0.5	2.6	9	11	0.06	1	3	1.5	0.020	0.074	－
C－2	37.7718°	140.7290°		8:58	7.3	0.6	8	9.2	12	0.06	3.8	23	7.3	0.042	0.16	－
C－3	37.7792°	140.8040°		9:55	7.7	<0.5	2.8	9.3	8.7	0.05	1.2	5	2.1	0.017	0.060	－
C－4	37.7687°	140.8443°		10:45	7.7	<0.5	2.6	9.9	9.2	0.05	1.1	4	2	0.0065	0.026	0.001
C－5	37.7646°	140.8603°		11:46	7.5	<0.5	2.9	9.3	9.4	0.05	1.3	2	2.5	0.020	0.065	－
C－6	37.7764°	140.8877°		13:07	7.7	<0.5	3	9.7	10.8	0.06	1.4	2	2.4	0.0068	0.026	－

＜Location C along the Uda River: General survey items/Analysis of radioactive materials Sediment＞

Items	Latitude and longitude of the location		Survey date and time		pH	Redox potential EN.H.E	Water content	IL	TOC	Soil particle density	Grain size distribution								Cs-134	Cs-137	Sr-90
Locations	Scheduled latitude	Scheduled longitude	Date	Time (sediment		(mV)	(%)	(%)	(mg/g-dry)	(g/cm3)	Gravel (2-75mm) (%)	Coarse sand (0.85-2mm) (%)	Medium sand (0.25-0.85mm) (%)	Fine sand (0.075-0.25mm) (%)	Silt (0.005-0.0075mm) (%)	Clay (Less than 0.005mm) (%)	Median grain diameter	Maximum grain diameter	(Bq/kg-dry)	(Bq/kg-dry)	(Bq/kg-dry)
C－1	37.7953°	140.7459°	2015/6/20	8:05	7	410	21.2	2.8	5.9	2.696	39.2	23.2	25.7	6.9	1.8	3.2	1.5	19	220	800	－
C－2	37.7718°	140.7290°		9:08	6.8	24	72.3	15.5	45.5	2.412	2.6	4.6	8	17	27.6	40.2	0.015	4.75	1500	5900	－
C－4	37.7687°	140.8443°		11:02	7.3	456	14.4	1.7	2.6	2.653	36.2	32.4	25.7	2.9	0.8	2	1.5	9.5	130	580	0.53
C－5	37.7646°	140.8603°		12:01	7	475	26.1	2.6	3.5	2.627	12.1	20.5	40.2	15	6.9	5.3	0.53	9.5	200	790	－
C－6	37.7764°	140.8877°		13:13	7.3	488	20.2	2.5	2.5	2.626	29.3	25.9	36	5.9	0.8	2.1	1	19	120	450	－

＜Location C along the Uda River: Analysis items Aquatic organisms＞

Location	Sampling point	Latitude and longitude of the location		Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)		Sr-90 (Bq/kg-wet)
		Latitude	Longitude										Growth stage	Stomach contents	Measurement site	Cs-134	Cs-137	
C-6	－	37.7764°	140.8877°	2015/6/18	Phycophyta	－	－	－	－	Riverbed Deposits (include algae)	-	0.015	－	－	－	89	350	-
					Arthropod	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	Stenopsyche marmorata	68	0.0071	Larva	－	－	24	64	-
					Arthropod	Insecta	Odonata	Corduliidae	*Macromia amphigena amphigena*	Macromia amphigena	16	0.0033	Larva (dragonfly larva)	－	－	N.D. (15.0)	12	-
					Arthropod	Insecta	Odonata	Gomphidae	*Melligomphus viridicostus*	Onychogomphus viridicostus								
					Arthropod	Insecta	Odonata	Gomphidae	*Sieboldius albardae*	Sieboldius albardae								
					Arthropod	Insecta	Odonata	Gomphidae	－	Davidius								
					Arthropod	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis	13	0.0076	Larva	－	－	N.D. (4.3)	6.9	-
					Arthropod	Malacostraca	Decapoda	Grapsidae	*Eriocheir japonica*	Japanese mitten crab	5	0.095	Imago	－	－	6.9	26	-
					Arthropoda	Malacostraca	Decapoda	Atyidae	*Paratya improvisa*	Freshwater shrimp	102	0.025	Imago	－	－	4.1	17	-
					Arthropod	Malacostraca	Decapoda	Procambarus	*Procambarus clarkii*	Red swamp crawfish	2	0.0065	Imago	－	－	5.3	14	-
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	*Misgurnus anguillicaudatus*	Oriental weatherfish	2	0.013	Mature fish	－	－	N.D. (3.9)	10	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Candidia temminckii*	Dark chub	18	0.12	Mature fish (3-year-old)	－	－	2.5	8.6	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Candidia temminckii*	Dark chub	28	0.016	Mature fish (1-year-old)	－	－	N.D. (3.9)	6.5	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	－	Rhinogobius	11	0.033	Mature fish	－	－	3.8	17	-
					Vertebrata	Amphibia	Anura	Rhacophoridae	*Buergeria buergeri*	Kajika flog	2	0.010	Imago	－	－	9.3	25	-
					Vertebrata	Amphibia	Anura	Ranidae	*Pelophylax porosus porosus*	Daruma pond frog								
					Particulate Organic Matter		－	－	－	Bottom fallen leaves	-	0.17	－	－	－	24	94	-

*1: Organisms were collected in or around the targeted water areas.
*2: When multiple types of aquatic organisms were collected, a sample was prepared by mixing them.
*3: For a sample made of multiple types of aquatic organisms, the name of the dominant one largest in number is underlined.
*4: Basically, measurement was conducted for all organism samples. Viscera (stomach and bowels) were removed for the measurement when possible so that undigested food and sediments, etc. in the digestive system would be excluded.
*5: A statement in red in the “Growth stage” column shows the age assessed based on squama or otolith.
*6: Plankton (suspended algae) is the residue remaining after the filtration of lake water or seawater with a plankton net (40μm-mesh).
*7: River bottom materials (incl. algae) are algae, etc. that were scratched off stones with a brush, etc. and may include very fine particles such as inorganic silt and clay.
*8: N.D. means to be below the detection limit and figures in parentheses show the detection limit.
*9: Activity concentrations include counting errors, but the details are omitted here.