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

<Location C along the Uda River: Samples collected>

Items / Locations	General items		Radioactive materials			
	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 / Locations	Latitude and longitude of the location		Survey date and time			Water	Sediment				Other	
	Latitude	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°	2016/12/8	08:43	08:53	5.0	5.2	Sand with gravel	2.5Y3/3	None	0.28	>50
C-2	37.7718°	140.7290°		09:40	09:52	3.0	3.8	Sediment with sand	2.5Y3/2	None	0.30	>50
C-3	37.7792°	140.8040°		10:47	-	6.2	-	-	-	-	0.40	>50
C-4	37.7687°	140.8443°		11:34	11:49	6.5	6.6	Sand	2.5Y4/2	None	0.34	>50
C-5	37.7646°	140.8603°		13:34	13:48	6.5	6.6	Sand	2.5Y4/4	None	0.36	>50
C-6	37.7764°	140.8877°		14:36	14:47	6.1	6.7	Sand	2.5Y4/2	None	0.34	>50

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

Items / Locations	Latitude and longitude of the location		Survey date and time		pH	BOD	COD	DO	Electric conductivity	Salinity	TOC	SS	Turbidity	Cs-134	Cs-137	Sr-90
	Latitude	Longitude	Date	Time (water)		(mg/L)	(mg/L)	(mg/L)	(mS/m)		(mg/L)	(mg/L)	(FNU)	(Bq/L)	(Bq/L)	(Bq/L)
C-1	37.7953°	140.7459°	2016/12/8	08:43	7.7	<0.5	1.3	13.2	9.9	0.06	0.4	<1	0.4	N.D.(0.0014)	0.0092	-
C-2	37.7718°	140.7290°		09:40	7.4	<0.5	2.2	12.3	8.8	0.05	0.9	3	1.4	0.0035	0.020	-
C-3	37.7792°	140.8040°		10:47	7.6	<0.5	1.6	12.2	8.4	0.05	0.6	<1	0.6	0.0017	0.011	-
C-4	37.7687°	140.8443°		11:34	7.6	<0.5	1.6	13.0	8.4	0.05	0.5	<1	0.6	N.D.(0.0014)	0.0062	0.0011
C-5	37.7646°	140.8603°		13:34	7.6	0.7	1.6	13.0	8.5	0.05	0.6	<1	0.6	0.0014	0.0052	-
C-6	37.7764°	140.8877°		14:36	7.7	<0.5	1.7	13.2	9.3	0.05	0.7	<1	0.4	N.D.(0.0014)	0.0060	-

Note) N.D. means to be below the detection limit and figures in parentheses show the detection limit.

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

Items / Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential $E_{N.H.E}$ (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm^3)	Grain size distribution								Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)
	Latitude	Longitude	Date	Time (sediment)							Gravel (2-75mm) (%)	Coarse sand (0.85-2mm) (%)	Medium sand (0.25-0.85mm) (%)	Fine sand (0.075-0.25mm) (%)	Silt (0.005-0.075mm) (%)	Clay (Less than 0.005mm) (%)	Median grain diameter (mm)	Maximum grain diameter (mm)			
C-1	37.7953°	140.7459°	2016/12/8	08:53	7.4	327	32.9	6.3	3.5	2.768	30.3	37.8	14.5	7.6	5.1	4.7	1.3	9.5	67	470	-
C-2	37.7718°	140.7290°		09:52	7.3	117	33.2	4.7	8.4	2.719	23.1	25.4	19.3	9.2	9.8	13.2	0.80	9.5	52	350	-
C-4	37.7687°	140.8443°		11:49	7.5	239	19.0	0.9	1.3	2.703	24.4	35.5	35.3	3.7	0.3	0.8	1.1	9.5	33	220	0.26
C-5	37.7646°	140.8603°		13:48	7.7	261	17.5	0.8	0.9	2.676	29.3	57.3	12.5	0.3	0.0	0.6	1.5	9.5	21	120	-
C-6	37.7764°	140.8877°		14:47	7.7	272	20.0	0.8	0.8	2.704	9.9	53.6	35.4	0.6	0.0	0.5	1.0	9.5	23	140	-

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

Locations	Sampling point	Latitude and longitude of the location		Sampling date	Division	Class	Order	Family	Scientific 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	Total	Cs-134	Cs-137	
C-6	-	37.7764°	140.8877°	2016/12/4	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.017	-	-	-	188	28	160	-
					Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera sp.*	Ephemera	199	0.0084	Larva	-	-	57.4	8.4	49	-
					Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria uenoi*	Kamimuria uenoi Kohno	74	0.0046	Larva	-	-	N.D.	N.D.(8.5)	N.D.(6.9)	-
					Arthropoda	Insecta	Plecoptera	Perlidae	*Oyamia sp.*	Oyamia									
					Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	Kamimura tibialis									
					Arthropoda	Insecta	Plecoptera	Perlidae	*Paragnetina sp.*	Paragnetina									
					Arthropoda	Insecta	Plecoptera	Perlidae	*Neoperla sp.*	Neoperla									
					Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	Stenopsyche marmorata	47	0.071	Larva	-	-	25.1	5.1	20	-
					Arthropoda	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis	7	0.0032	Larva	-	-	N.D.	N.D.(10)	N.D.(9.7)	-
					Arthropoda	Insecta	Megaloptera	Corydalidae	*Parachauliodes japonicus*	Parachauliodes japonicus									
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	*Palaemon paucidens*	Common prawn	14	0.011	Imago	-	-	8.4	N.D.(3.4)	8.4	-
					Arthropoda	Malacostraca	Decapoda	Varunidae	*Eriocheir japonica*	Japanese mitten crab	4	0.23	Imago	-	-	16.2	2.2	14	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	28	0.053	Immature fish	Obscure digesta	Viscera removed	13.1	2.1	11	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Zacco platypus*	Pale chub	9	0.0093	Immature fish	Obscure digesta	Viscera removed	10	N.D.(4.4)	10	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Nipponocypris temminckii*	Dark chub	6	0.011	Immature fish	Obscure digesta	Viscera removed	6.4	N.D.(3.0)	6.4	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius sp. CB*	Rhinogobius nagoyae	6	0.013	Mature fish	Obscure digesta	Viscera removed	15	N.D.(3.5)	15	-
					Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.26	-	-	-	7.5	1.2	6.3	-

*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 English 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: Plankton (suspended algae) is the residue remaining after the filtration of lake water or seawater with a plankton net (40μm-mesh).

*6: 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.

*7: N.D. means to be below the detection limit and figures in parentheses show the detection limit.

*8: Activity concentrations include counting errors, but the details are omitted here.