○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-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-6	37.7764°	140.8877°	2023/6/15	09:45	09:55	18.0	18.4	Sand	10YR4/2	None	0.40	>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 (mg/L)	COD (mg/L)	DO (mg/L)	Electric conductivity (mS/m)	Salinity	TOC (mg/L)	SS (mg/L)	Turbidity (FNU)	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Sr-90 (Bq/L)
	Latitude	Longitude	Date	Time (water)												
C-6	37.7764°	140.8877°	2023/6/15	09:45	7.7	0.6	4.0	9.7	11.7	0.06	1.9	3	1.8	N.D.(0.0015)	0.018	0.00098

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)
											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)			
	Latitude	Longitude	Date	Time (sediment)																	
C-6	37.7764°	140.8877°	2023/6/15	09:55	7.8	501	16.8	1.2	0.4	2.670	38.9	32.0	20.7	3.2	3.0	2.2	1.5	9.5	1.0	61	0.24

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

<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	The main stream of the Uda River	37.7764°	140.8877°	2023/6/10	Algae/plant	-	-	-	-	Sediment deposited on riverbed (Including algae)	-	0.0037	-	-	-	24	N.D.(7.5)	24	-
					Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria uenoi*	Stonefly	94	0.018	Larva	-	-	N.D.	N.D.(2.3)	N.D.(1.8)	-
					Arthropoda	Insecta	Plecoptera	Perlidae	*Oyamia lugubris*	Stonefly									
					Arthropoda	Insecta	Plecoptera	Perlidae	*Paragnetina suzukii*	Stonefly									
					Arthropoda	Insecta	Plecoptera	Perlidae	*Neoperla* sp.	Stonefly									
					Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	Caddisfly	154	0.016	Larva	-	-	22	N.D.(3.1)	22	-
					Arthropoda	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Dobsonfly	40	0.034	Larva	-	-	6.2	N.D.(1.2)	6.2	-
					Arthropoda	Malacostraca	Decapoda	Cambaridae	*Procambarus clarkii*	Red swamp crawfish	5	0.11	Imago	-	-	2.5	N.D.(0.59)	2.5	-
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	*Palaemon paucidens*	Lake prawn	12	0.012	Imago	-	-	1.8	N.D.(2.4)	1.8	-
					Arthropoda	Malacostraca	Decapoda	Atyidae	*Paratya improvisa*	Freshwater shrimp	137	0.081	Juvenile,Imago	-	-	3.8	N.D.(0.51)	3.8	-
					Arthropoda	Malacostraca	Decapoda	Varunidae	*Eriocheir japonica*	Japanese mitten crab	30	0.36	Juvenile	-	-	3.5	N.D.(0.30)	3.5	-
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	1	0.095	Immature fish	*Lethenteron* sp., *Procambarus clarkii* ,Pillbug	Viscera removed	2.5	N.D.(0.56)	2.5	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Opsariichthys platypus*	Pale break	98	0.22	Immature fish, Mature fish	-	-	2.3	N.D.(0.27)	2.3	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Pseudogobio esocinus*	Pseudogobio	3	0.049	Immature fish, Mature fish	-	-	1.7	N.D.(1.1)	1.7	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Candidia temminckii*	Dark chub	37	0.078	Immature fish	-	-	2.2	N.D.(0.63)	2.2	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Gnathopogon elongatus elongatus*	Field gudgeon	9	0.054	Immature fish, Mature fish	-	-	4.7	N.D.(0.99)	4.7	-
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	*Cobitis* sp.	Japanese striped loach	5	0.014	Mature fish	-	-	2.8	N.D.(2.6)	2.8	-
					Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	*Plecoglossus altivelis altivelis*	Ayu sweetfish	114	1.6	Immature fish, Mature fish	-	-	7.0	N.D.(0.86)	7.0	0.095
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Gymnogobius urotaenia*	Floating goby	2	0.020	Immature fish	-	-	4.2	N.D.(2.5)	4.2	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius fluviatilis*	Rhinogobius	28	0.11	Immature fish, Mature fish	-	-	3.9	N.D.(0.76)	3.9	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius nagoyae*	Rhinogobius									
					Vertebrata	Cephalaspidomorphi	Petromyzontiformes	Petromyzontidae	*Lethenteron* sp.	Lethenteron	2	0.0080	Ammocoetes (larva)	-	-	N.D.	N.D.(4.6)	N.D.(3.9)	-
					Coarse Particulate Organic Matter	-	-	-	-	Water-bottom leaf litter	-	0.27	-	-	-	29	N.D.(1.3)	29	-

*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.