○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°	2020/8/24	11:54	12:14	24.5	24.0	Gravel with sand	10YR4/3	None	0.41	>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-6	37.7764°	140.8877°	2020/8/24	11:54	7.9	<0.5	2.3	11.1	10.7	0.06	1.0	2	1.1	N.D.(0.0016)	0.0053	0.00067

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	Water content	IL	TOC	Soil particle density	Grain size distribution								Cs-134	Cs-137	Sr-90
	Latitude	Longitude	Date	Time (sediment)		$E_{N.H.E}$ (mV)	(%)	(%)	(mg/g-dry)	(g/cm^3)	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)	(Bq/kg-dry)	(Bq/kg-dry)	(Bq/kg-dry)
C-6	37.7764°	140.8877°	2020/8/24	12:14	7.5	460	16.5	0.7	1.5	2.728	39.8	41.4	18.0	0.6	0.2		1.7	9.5	2.1	34	0.23

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
		Latitude	Longitude										Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	(Bq/kg-wet)
C-6	The main stream of the Uda River	37.7764°	140.8877°	2020/8/5	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0021	-	-	-	33	N.D.(15)	33	-
				2020/8/6	Arthropoda	Insecta	Megaloptera	Corydalidae	*Parachauliodes sp.*	Parachauliodes	17	0.0099	Larva	-	-	4.6	N.D.(4.8)	4.6	-
					Arthropoda	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis									
				2020/8/5	Arthropoda	Malacostraca	Decapoda	Cambaridae	*Procambarus clarkii*	Red swamp crawfish	2	0.026	Imago	-	-	3.1	N.D.(1.8)	3.1	-
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	*Palaemon paucidens*	Common prawn	35	0.045	Imago	-	-	2.0	N.D.(2.3)	2.0	-
				2020/8/6	Arthropoda	Malacostraca	Decapoda	Atyidae	*Paratya improvisa*	Freshwater shrimp	65	0.013	Juvenile,Imago	-	-	4.1	N.D.(2.6)	4.1	-
				2020/8/5	Arthropoda	Malacostraca	Decapoda	Varunidae	*Eriocheir japonica*	Japanese mitten crab	12	0.20	Juvenile	-	-	5.0	N.D.(0.41)	5.0	-
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	2	0.45	Immature fish,Mature fish	Empty stomach	Viscera removed	15.72	0.72	15	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	8	0.13	Immature fish	-	-	2.9	N.D.(0.44)	2.9	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Opsariichthys platypus*	Pale chub	5	0.061	Immature fish	-	-	4.8	N.D.(2.2)	4.8	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Candidia temminckii*	Dark chub	20	0.23	Immature fish,Mature fish	-	-	4.1	N.D.(0.44)	4.1	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Cyprinus carpio*	Common carp	3	0.011	Immature fish	-	-	7.4	N.D.(9.0)	7.4	-
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	*Cobitis biwae*	Cobitis biwae	13	0.038	Mature fish	-	-	2.6	N.D.(1.9)	2.6	-
					Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	*Plecoglossus altivelis altivelis*	Sweetfish	34	0.44	Immature fish,Mature fish	-	-	15.82	0.82	15	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Gymnogobius urotaenia*	Goby	14	0.11	Immature fish	-	-	6.5	N.D.(0.53)	6.5	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius fluviatilis*	Rhinogobius fluviatilis	34	0.087	Immature fish,Mature fish	-	-	5.3	N.D.(0.99)	5.3	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius nagoyae*	Rhinogobius nagoyae									
					Vertebrata	Osteichthyes	Siluriformes	Bagridae	*Tachysurus tokiensis*	Cut-tailed bullhead	1	0.020	Mature fish	-	-	4.9	N.D.(2.6)	4.9	-
					Vertebrata	Cephalaspidomorphi	Petromyzontiformes	Petromyzontidae	*Lethenteron reissneri*	Far eastern brook lamprey	3	0.0086	Ammocoetes(larva)	-	-	N.D.	N.D.(4.4)	N.D.(4.1)	-
					Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.18	-	-	-	0.82	N.D.(0.46)	0.82	-

*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.