○Results of Radioactive Material Monitoring of Aquatic Organisms (Location E along the Niida River)

<Location E along the Niida River: Samples collected>

Items / Locations	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
E-2 a	○	○	○	○	○	○

<Location E along the Niida 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)
E-2 a	37.6640°	140.9447°	2020/7/1	13:35	13:45	22.8	23.3	Sand	10YR4/4	None	0.55	>50

<Location E along the Niida 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)
E-2 a	37.6640°	140.9447°	2020/7/1	13:35	7.5	0.5	3.1	9.1	8.0	0.05	1.1	11	6.7	0.0054	0.087	0.0016

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

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

Items / Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential $E_{N.H.E}$	Water content	IL	TOC	Soil particle density	Grain size distribution								Cs-134	Cs-137	Sr-90
	Latitude	Longitude	Date	Time (sediment)		(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)
E-2 a	37.6640°	140.9447°	2020/7/1	13:45	7.4	505	19.6	1.1	2.9	2.675	3.7	32.4	51.1	10.4	2.4		0.69	9.5	13	280	0.19

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

<Location E along the Niida 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)
E-2 b	The main stream of the Niida River	37.6635°	140.9452°	2020/7/1	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0023	-	-	-	110	N.D.(26)	110	-
					Arthropoda	Insecta	Ephemeroptera	Isonychiidae	*Isonychia valida*	Isonychia valida	480	0.011	Larva	-	-	109	11	98	-
					Arthropoda	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis	21	0.012	Larva	-	-	16	N.D.(2.4)	16	-
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	*Palaemon paucidens*	Common prawn	265	0.22	Imago	-	-	15.99	0.99	15	-
					Arthropoda	Malacostraca	Decapoda	Varunidae	*Eriocheir japonica*	Japanese mitten crab	12	0.18	Juvenile	-	-	23.8	1.8	22	-
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	1	0.071	Immature fish	Empty stomach	Viscera removed	24	N.D.(4.0)	24	-
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	1	0.15	Immature fish	Far eastern brook lamprey	Viscera removed	42.8	2.8	40	-
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	1	0.28	Mature fish	Empty stomach	Viscera removed	57.0	3.0	54	0.29
					Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	*Cottus pollux*	Japanese fluvial sculpin	11	0.12	Immature fish	-	-	14.4	1.4	13	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	1	0.0075	Immature fish	-	-	19	N.D.(16)	19	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Opsariichthys platypus*	Pale chub	15	0.11	Immature fish,Mature fish	-	-	14.73	0.73	14	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Pseudogobio esocinus esocinus*	Pseudogobio esocinus esocinus	2	0.048	Mature fish	-	-	15	N.D.(2.1)	15	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Sarcocheilichthys variegatus variegatus*	Sarcocheilichthys variegatus variegatus	1	0.015	Mature fish	-	-	12	N.D.(2.3)	12	-
					Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	*Plecoglossus altivelis altivelis*	Sweetfish	7	0.097	Immature fish	-	-	46.4	2.4	44	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius fluviatilis*	Rhinogobius fluviatilis	17	0.077	Mature fish	-	-	27.5	1.5	26	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius nagoyae*	Rhinogobius nagoyae									
					Vertebrata	Osteichthyes	Siluriformes	Siluridae	*Silurus asotus*	Amur catfish	1	0.38	Mature fish	Empty stomach	Viscera removed	49.2	2.2	47	-
					Vertebrata	Cephalaspidomorphi	Petromyzontiformes	Petromyzontidae	*Lethenteron reissneri*	Far eastern brook lamprey	5	0.012	Ammocoetes(larva)	-	-	12	N.D.(8.4)	12	-
					Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.20	-	-	-	168.1	8.1	160	-

*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.