○Results of Radioactive Material Monitoring of Aquatic Organisms (Location F along the Ota River)

<Location F along the Ota River: Samples collected>

Items / Locations	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
F-1	○	○	○	○	○	○

<Location F along the Ota 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)
F-1	37.5975°	140.9252°	2017/6/15	10:34	10:58	15.1	15.1	Sand	2.5Y4/2	None	0.36	>50

<Location F along the Ota 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)												
F-1	37.5975°	140.9252°	2017/6/15	10:34	7.2	0.6	2.7	10.5	5.1	0.03	1.0	2	1.0	0.018	0.13	0.0037

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

<Location F along the Ota 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)																	
F-1	37.5975°	140.9252°	2017/6/15	10:58	7.2	292	21.1	1.1	1.7	2.661	25.6	22.8	39.0	7.6	1.1	3.9	0.82	9.5	270	2000	0.44

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

<Location F along the Ota 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	
F-1	The main stream of the Ota River	37.5975°	140.9252°	2017/6/15	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.013	-	-	-	1260	160	1100	-
					Algae/plant	Zygnematophyceae	Zygnematales	Zygnemataceae	*Spirogyra sp.*	Spirogyra	-	0.34	-	-	-	17.9	1.9	16	-
					Arthropoda	Insecta	Ephemeroptera	Isonychiidae	*Isonychia japonica*	Isonychia japonica	89	0.0081	Larva	-	-	202	32	170	-
					Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	Stenopsyche marmorata	123	0.047	Larva	-	-	249	29	220	-
					Arthropoda	Insecta	Odonata	Corduliidae	*Macromia amphigena amphigena*	Macromia amphigena	39	0.014	Larva (Dragonfly larva)	-	-	238	28	210	-
					Arthropoda	Insecta	Odonata	Gomphidae	*Stylogomphus suzukii*	Stylogomphus suzukii									
					Arthropoda	Insecta	Odonata	Gomphidae	*Onychogomphus viridicostus*	Melligomphus viridicostus									
					Arthropoda	Insecta	Odonata	Gomphidae	*Sieboldius albardae*	Sieboldius albardae									
					Arthropoda	Insecta	Odonata	Gomphidae	*Asiagomphus melaenops*	Asiagomphus melaenops									
					Arthropoda	Insecta	Odonata	Aeshnidae	*Planaeschna milnei*	Planaeschna milnei									
					Arthropoda	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis	24	0.0076	Larva	-	-	63.0	8.0	55	-
					Arthropoda	Insecta	Megaloptera	Corydalidae	*Parachauliodes japonicus*	Parachauliodes japonicus									
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	*Palaemon paucidens*	Common prawn	18	0.039	Imago	-	-	231	31	200	-
					Arthropoda	Malacostraca	Decapoda	Atyidae	*Paratya improvisa*	Freshwater shrimp	145	0.047	Juvenile,Imago	-	-	173	23	150	-
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	2	0.33	Immature fish,Mature fish	Grasshopper,Freshwater shrimp	Viscera removed	638	78	560	-
					Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	*Cottus pollux*	Japanese fluvial sculpin	2	0.051	Immature fish	-	-	493	63	430	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	11	0.050	Immature fish	-	-	295	35	260	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Zacco platypus*	Pale chub	2	0.033	Immature fish	-	-	274	34	240	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Carassius auratus*	Carassius auratus langsdorfii	3	0.092	Immature fish,Mature fish	-	-	263	33	230	-
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	*Cobitis biwae*	Cobitis biwae	10	0.012	Immature fish,Mature fish	-	-	283	33	250	-
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	*Lefua echigonia*	Lefua echigonia	9	0.015	Immature fish,Mature fish	-	-	148	18	130	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius fluviatilis*	Rhinogobius fluviatilis	7	0.026	Immature fish,Mature fish	-	-	549	69	480	-
					Vertebrata	Amphibia	Anura	-	-	Frog	100	0.033	Larva (Tadpole)	-	-	80	11	69	-
					Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.26	-	-	-	216	26	190	-
F-3	The main stream of the Ota River	37.6045°	140.9636°	2017/6/15	Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	2	0.81	Mature fish	Shrimp	Viscera removed	1140	140	1000	-
F-5	The main stream of the Ota River	37.6022°	140.9868°	2017/6/15	Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	6	0.58	Immature fish,Mature fish	Japanese mitten Crab	Viscera removed	206	26	180	-
					Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	*Plecoglossus altivelis*	Sweetfish	191	1.3	Immature fish	-	-	99	12	87	0.22

*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.