○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°	2022/8/19	08:48	09:15	21.6	21.4	Sand with silt	10Y4/2	None	0.28	>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	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)
F-1	37.5975°	140.9252°	2022/8/19	08:48	7.5	0.7	2.8	9.2	5.8	0.04	1.2	2	0.9	0.0020	0.081	0.0026

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_{NHE}	Water content	IL	TOC	Soil particle density	Grain size distribution								Cs-134	Cs-137	Sr-90
											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	Maximum grain diameter			
	Latitude	Longitude	Date	Time (sediment)		(mV)	(%)	(%)	(mg/g-dry)	(g/cm^3)	(%)	(%)	(%)	(%)	(%)	(%)	(mm)	(mm)	(Bq/kg-dry)	(Bq/kg-dry)	(Bq/kg-dry)
F-1	37.5975°	140.9252°	2022/8/19	09:15	7.5	476	21.2	1.0	1.6	2.640	14.9	23.3	37.2	12.5	6.2	5.9	0.60	9.5	4.9	230	0.59

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°	2022/8/19	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.017	-	-	-	773	23	750	-
					Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	*Stenopsyche marmorata*	83	0.021	Larva	-	-	50	N.D.(7.3)	50	-
					Arthropoda	Insecta	Odonata	Corduliidae	*Macromia amphigena amphigena*	*Macromia amphigena amphigena*	19	0.0065	Larva (Dragonfly larva)	-	-	49	N.D.(7.2)	49	-
					Arthropoda	Insecta	Odonata	Cordulegastridae	*Anotogaster sieboldii*	*Anotogester sieboldii*									
					Arthropoda	Insecta	Odonata	Gomphidae	*Melligomphus viridicostus*	*Melligomphus viridicostus*									
					Arthropoda	Insecta	Odonata	Gomphidae	*Sieboldius albardae*	*Sieboldius albardae*									
					Arthropoda	Insecta	Odonata	Gomphidae	*Davidius* sp.	Davidius									
					Arthropoda	Insecta	Odonata	Gomphidae	*Asiagomphus melaenops*	*Asiagomphus melaenops*									
					Arthropoda	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	*Protohermes grandis*	33	0.015	Larva	-	-	27	N.D.(5.8)	27	-
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	*Palaemon paucidens*	Common prawn	73	0.076	Imago	-	-	85	N.D.(3.3)	85	-
					Arthropoda	Malacostraca	Decapoda	Atyidae	*Paratya improvisa*	Freshwater shrimp	133	0.022	Juvenile	-	-	65	N.D.(9.8)	65	-
					Arthropoda	Malacostraca	Decapoda	Varunidae	*Eriocheir japonica*	Japanese mitten crab	14	0.060	Juvenile	-	-	89	N.D.(4.6)	89	-
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	7	2.3	Mature fish	Common prawn	Viscera removed	123.7	3.7	120	0.52
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	6	0.43	Mature fish	Obscure digesta	Viscera removed	133.2	3.2	130	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Opsariichthys platypus*	Pale chub	21	0.22	Immature fish, Mature fish	-	-	91.3	2.3	89	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Candidia temminckii*	Dark chub	28	0.17	Immature fish, Mature fish	-	-	64	N.D.(1.9)	64	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Carassius auratus langsdorfii*	*Carassius auratus langsdorfii*	1	0.026	Immature fish	-	-	60	N.D.(6.0)	60	-
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	*Cobitis biwae*	*Cobitis biwae*	6	0.014	Immature fish, Mature fish	-	-	55	N.D.(12)	55	-
					Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	*Plecoglossus altivelis altivelis*	Sweetfish	2	0.060	Immature fish, Mature fish	-	-	177.8	7.8	170	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius fluviatilis*	*Rhinogobius fluviatilis*	12	0.073	Immature fish, Mature fish	-	-	237.9	7.9	230	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius nagoyae*	*Rhinogobius nagoyae*									
					Vertebrata	Amphibia	Anura	Rhacophoridae	*Rhacophorus schlegelii*	Schlegel's green tree frog	5	0.015	Imago	-	-	19	N.D.(4.3)	19	-
					Vertebrata	Amphibia	Anura	Ranidae	*Rana japonica*	Japanese brown frog									
					Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.26	-	-	-	154.1	4.1	150	-
F-5	The main stream of the Ota River	37.6022°	140.9868°	2022/8/21	Arthropoda	Malacostraca	Decapoda	Cambaridae	*Procambarus clarkii*	Red swamp crawfish	1	0.036	Imago	-	-	27	N.D.(5.7)	27	-
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	*Palaemon paucidens*	Common prawn	211	0.082	Juvenile,Imago	-	-	19	N.D.(2.3)	19	-
					Arthropoda	Malacostraca	Decapoda	Varunidae	*Eriocheir japonica*	Japanese mitten crab	7	0.018	Juvenile	-	-	32	N.D.(4.1)	32	-
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	8	0.81	Immature fish, Mature fish	Empty stomach	Viscera removed	63.8	1.8	62	-
					Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	*Cottus reinii*	Sculpin	5	0.025	Immature fish	-	-	24	N.D.(4.8)	24	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	3	0.035	Immature fish	-	-	19	N.D.(3.1)	19	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Opsariichthys platypus*	Pale chub	12	0.086	Immature fish, Mature fish	-	-	19	N.D.(2.3)	19	-
				2022/9/2	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Opsariichthys platypus*	Pale chub	13	0.18	Immature fish, Mature fish	-	-	16	N.D.(1.7)	16	-
				2022/8/21	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Candidia temminckii*	Dark chub	15	0.061	Immature fish	-	-	17	N.D.(3.5)	17	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Cyprinus carpio*	Common carp	1	3.6	Mature fish	Obscure digesta	Viscera removed	42	N.D.(1.3)	42	1.6
				2022/9/2	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Cyprinus carpio*	Common carp	1	4.7	Mature fish	Obscure digesta	Viscera removed	59	N.D.(1.5)	59	1.8
				2022/8/21	Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	*Misgurnus anguillicaudatus*	Oriental weatherfish	2	0.010	Immature fish, Mature fish	-	-	8.2	N.D.(3.0)	8.2	-
					Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	*Plecoglossus altivelis altivelis*	Sweetfish	228	1.7	Immature fish	-	-	82.3	2.3	80	0.58
					Vertebrata	Osteichthyes	Perciformes	Centrarchidae	*Micropterus salmoides*	Largemouth bass	1	0.019	Immature fish	-	-	22	N.D.(1.9)	22	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius nagoyae*	*Rhinogobius nagoyae*	34	0.055	Immature fish, Mature fish	-	-	31	N.D.(3.4)	31	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius* sp.	Rhinogobius									
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Tridentiger brevispinis*	Dusky tripletooth goby	69	0.15	Immature fish, Mature fish	-	-	19	N.D.(1.9)	19	-
					Vertebrata	Osteichthyes	Perciformes	Mugilidae	*Mugil cephalus cephalus*	Flathead mullet	2	0.021	Immature fish	-	-	69	N.D.(8.0)	69	-

*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.