OResults of Radioactive Material Monitoring of Aquatic Organisms (Location M off Iwaki City)

<Location M off Iwaki City: Samples collected>

| Items | Gener | al items | Radioactive materials | | | | | | | | |
|-----------|-------|----------|-----------------------|------------|---------------|---------------|--|--|--|--|--|
| Locations | Water | Sediment | Water (Cs) | Water (Sr) | Sediment (Cs) | Sediment (Sr) | | | | | |
| M-2 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |

<Location M off Iwaki City: Site measurement item>

| Items | Items Latitude and longitude of the location | | | Survey date and time | | Water | | Sedi | ment | | Ot | her | |
|--------------------|--|-----------|-----------------------------------|----------------------|-----------------|----------------------------------|---|------|-------|-----------------|-----------------|-----------------------|--|
| Locations | Latitude | Longitude | Date Time (water) Time (sediment) | | Time (sediment) | Water temperature (degrees C) | Sediment temperature (degrees C) Property | | Color | Contaminants | Water depth (m) | Secchi disk depth (m) | |
| M-2(Surface layer) | 37.1996° | 141.0853° | 2018/12/4 | 08:05 | 08:50 | 17.1 | 16.6 | Sand | 5Y3/2 | Shell fragments | 42.0 | 12.5 | |
| M-2(Bottom layer) | | 141.0853* | | 08:15 | | | | | | | | 12.5 | |

<Location M off Iwaki City: General survey items/Analysis of radioactive materials Water>

| assention in that city, sensition are years and survey across the city | | | | | | | | | | | | | | | | |
|--|---|----------------|-----------|--------------|-----|--------|--------|--------|--------------------------|----------|--------|--------|-----------|--------------|--------|---------|
| Items | Latitude and longitude of the location | | Survey da | te and time | pH | BOD | COD | DO | Electric conductivity | Salinity | TOC | SS | Turbidity | Cs-134 | Cs-137 | Sr-90 |
| Locations | Latitude | Longitude | Date | Time (water) | | (mg/L) | (mg/L) | (mg/L) | (mS/m) | | (mg/L) | (mg/L) | (FNU) | (Bq/L) | (Bq/L) | (Bq/L) |
| M-2(Surface layer) | 37.1996° | 996° 141.0853° | 2018/12/4 | 08:05 | 8.1 | <0.5 | 1.3 | 8.0 | 5080 | 34.13 | 0.9 | 2 | 0.4 | N.D.(0.0014) | 0.0022 | - |
| M-2(Bottom layer) | 37.1990 | 141.0033 | 2010/12/4 | 08:15 | 8.1 | <0.5 | 1.4 | 7.6 | 5080 | 34.11 | 1.0 | 2 | 0.6 | N.D.(0.0013) | 0.0017 | 0.00087 |

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

<Location M off Iwaki City: General survey items/Analysis of radioactive materials Sediment>

| | Items | Latitude and longitude of the location | | Survey date and time | | pH | | | | | | Grain size distribution | | | | | | | | | T I | |
|----|-----------|--|-----------|----------------------|-----------------|-----|------------------|---------------|-----|------------|----------------------|-------------------------|-------------|---------------|----------------|-----------------|---------------------|--------------|----------------|-------------|-------------|-------------|
| | | | | | | | Redox potential | Water content | IL | TOC | Soil particle | Gravel | Coarse sand | Medium sand | Fine sand | Silt | Clay | Median grain | Maximum | Cs-134 | Cs-137 | Sr-90 |
| Lo | Locations | Latitude | Loneitude | Date | Time (sediment) | | E _{NHE} | | | | density | (2-75mm) | (0.85-2mm) | (0.25-0.85mm) | (0.075-0.25mm) | (0.005-0.075mm) | (Less than 0.005mm) | diameter | grain diameter | | | |
| | | Limitude | | | () | | (mV) | (%) | (%) | (mg/g-dry) | (g/cm ³) | (%) | (%) | (%) | (%) | (%) | (%) | (mm) | (mm) | (Bq/kg-dry) | (Bq/kg-dry) | (Bq/kg-dry) |
| | M-2 | 37.1996° | 141.0853° | 2018/12/4 | 08:50 | 7.8 | 214 | 21.6 | 1.8 | 2.8 | 2.776 | 0.0 | 0.0 | 1.3 | 94.3 | 1.0 | 3.4 | 0.15 | 0.85 | 2.2 | 25 | N.D.(0.13) |
| | | | | | | | | | | | | | | | | | | | | | | |

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

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|---|--|----------------|--|-----------|---------------|--------------|--------------|-------------------|-----------------------|---------------------------|-------------------|-------------|---------------|---------------|------------------|------------------|------------|--------------------------------|--------|-------------|
| | Locations | Sampling point | Latitude and longitude of the | | Sampling date | Division | Class | Outur | Possibe. | Scientific name | English name | Population | Sample weight | e weight Note | | | | Radioactive cesium (Bq/kg-wet) | | |
| | Locations | | Latitude | Longitude | Samping date | Division | Cass | Order | Family | Seemile Halle | anignos liame | 1 opunitori | (kg-wet) | Growth stage | Stomach contents | Measurement site | Total | Cs-134 | Cs-137 | (Bq/kg-wet) |
| | M-1 | Offshore of | 37.1736° | 141.0788° | 2010/12/4 | Vertebrata | Osteichthyes | Pleuronectiformes | Paralichthyidae | Pseudorhombus cinnamoneus | Cinnamon flounder | 6 | 0.32 | Immature fish | Empty stomach | Viscera removed | 0.50 | N.D.(0.42) | 0.50 | - |
| | M-2 M-3 | Hisanohama | 37.1996° 141.0853° 2018/12/4 37.2324° 141.0935° | 2010/12/4 | Vertebrata | Osteichthyes | Perciformes | Lateolabracidae | Lateolabrax japonicus | Japanese sea bass | 1 | 1.3 | Immature fish | Empty stomach | Viscera removed | 1.3 | N.D.(0.42) | 1.3 | - | |

*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 algue) 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.