Inspection Status of Trench, etc. at Fukushima Daiichi Nuclear Power Station (Preliminary Result, January 19, 2012)

Tokyo Electric power Company

January 19, 2012

Revised

Regarding “Discharge valve pit of circulating water pump of Unit 4 pump room” inspected on January 19, we conducted inspection again on January 31 since we sampled at wrong point on January 19.

Unit 2 Common Piping Duct

Discharge valve pit of circulating water pump of Unit 2 pump room

Discharge valve pit of circulating water pump of Unit 3 pump room

Discharge valve pit of circulating water pump of Unit 4 pump room

*We reinspected on January 31

<Legend>
- Trenches connecting to buildings where high-level radioactive contaminated water has been accumulated
- Trenches around Unit 1-4 (other than those above)
- Trenches around Unit 5-6 and others
- Trenches where high-level radioactive contaminated water are influent in (incl. trench which are not aimed for this time’s inspection)
Inspection Status of Trench, etc. at Fukushima Daiichi Nuclear Power Station (Preliminary Result of the Unit 2 Common Piping Duct)

January 19, 2012
Tokyo Electric Power Company

【Result】
We found no puddle in today’s inspection.

【Date】
Around 9:20 am, on January 19, 2012

【Place】
The Unit 2 Common Piping Duct
Inspection Status of Trench, etc. at Fukushima Daiichi Nuclear Power Station
(Preliminary Result of the Discharge valve pit of circulating water pump of Unit 2
pump room)

January 19, 2012
Tokyo Electric Power Company

【Result】
We found a puddle in today’s inspection.

【Date】
Around 10:50 am, on January 19, 2012

【Place】
Discharge valve pit of circulating water pump of Unit 2 pump room

【Amount of the puddle】
Approx 500m³

【Surface dose rate of the container of the collected water】
Approx 0.045mSv/h (Approx 45 μSv/h)

【Preliminary nuclide analysis results】
The nuclide analysis results of the collected water are as follows.

<table>
<thead>
<tr>
<th>Nuclide</th>
<th>Radioactivity Concentration (Bq/cm³)</th>
<th>Measurable Limits (Bq/cm³)</th>
<th>Half-life</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-131</td>
<td>ND</td>
<td>3.8 X 10¹</td>
<td>Around 8 days</td>
</tr>
<tr>
<td>Cs-134</td>
<td>7.1 X 10³</td>
<td>3.6 X 10¹</td>
<td>Around 2 years</td>
</tr>
<tr>
<td>Cs-137</td>
<td>9.1 X 10³</td>
<td>3.2 X 10¹</td>
<td>Around 30 years</td>
</tr>
</tbody>
</table>
Inspection Status of Trench, etc. at Fukushima Daiichi Nuclear Power Station
(Preliminary Result of the Discharge valve pit of circulating water pump of Unit 3 pump room)

January 19, 2012
Tokyo Electric Power Company

【Result】
We found a puddle in today’s inspection.

【Date】
Around 10:40 am, on January 19, 2012

【Place】
Discharge valve pit of circulating water pump of Unit 3 pump room

【Amount of the puddle】
Approx 600m³

【Surface dose rate of the container of the collected water】
Approx 0.021mSv/h (Approx 21 μSv/h)

【Preliminary nuclide analysis results】
The nuclide analysis results of the collected water are as follows.

<table>
<thead>
<tr>
<th>Nuclide</th>
<th>Radioactivity Concentration (Bq/cm³)</th>
<th>Measurable Limits (Bq/cm³)</th>
<th>Half-life</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-131</td>
<td>ND</td>
<td>1.7X 10⁰</td>
<td>Around 8 days</td>
</tr>
<tr>
<td>Cs-134</td>
<td>3.8 X 10²</td>
<td>1.7 X 10⁰</td>
<td>Around 2 years</td>
</tr>
<tr>
<td>Cs-137</td>
<td>4.8 X 10²</td>
<td>1.5 X 10⁰</td>
<td>Around 30 years</td>
</tr>
</tbody>
</table>
Inspection Status of Trench, etc. at Fukushima Daiichi Nuclear Power Station
(Preliminary Result of the Discharge valve pit of circulating water pump of Unit 4 pump room)

January 31, 2012
Tokyo Electric Power Company

Result
We found a puddle in today’s inspection.

Date
Around 9:50 am, on January 31, 2012

Place
Discharge valve pit of circulating water pump of Unit 4 pump room

Amount of the puddle
Under evaluation

Surface dose rate of the container of the collected water
Approx 0.0013mSv/h (Approx 1.3 × 10⁻² Sv/h)

Preliminary nuclide analysis results
The nuclide analysis results of the collected water are as follows.

<table>
<thead>
<tr>
<th>Nuclide</th>
<th>Radioactivity Concentration (Bq/cm³)</th>
<th>Measurable Limits (Bq/cm³)</th>
<th>Half-life</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-131</td>
<td>ND</td>
<td>7.2 X 10⁻²</td>
<td>Around 8 days</td>
</tr>
<tr>
<td>Cs-134</td>
<td>4.5 X 10⁰</td>
<td>8.3 X 10⁻²</td>
<td>Around 2 years</td>
</tr>
<tr>
<td>Cs-137</td>
<td>6.3 X 10⁰</td>
<td>8.7 X 10⁻²</td>
<td>Around 30 years</td>
</tr>
</tbody>
</table>

Regarding inspection on January 19, we conducted inspection again on January 31 since we sampled at wrong point.
Inspection Status of Trench, etc. at Fukushima Daiichi Nuclear Power Station
(Preliminary Result of the Common piping duct of Centralized Radiation Waste Treatment Facility waste system)

January 19, 2012
Tokyo Electric Power Company

【Result】
We found a puddle in today’s inspection.

【Date】
Around 10:20 am, on January 19, 2012

【Place】
Common piping duct of Centralized Radiation Waste Treatment Facility waste system

【Amount of the puddle】
Under evaluation

【Surface dose rate of the container of the collected water】
Approx 0.005mSv/h (Approx 5 µSv/h)

【Preliminary nuclide analysis results】
The nuclide analysis results of the collected water are as follows.

<table>
<thead>
<tr>
<th>Nuclide</th>
<th>Radioactivity Concentration (Bq/cm³)</th>
<th>Measurable Limits (Bq/cm³)</th>
<th>Half-life</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-131</td>
<td>ND</td>
<td>3.4 X 10⁻²</td>
<td>Around 8 days</td>
</tr>
<tr>
<td>Cs-134</td>
<td>7.3 X 10⁻¹</td>
<td>6.1 X 10⁻²</td>
<td>Around 2 years</td>
</tr>
<tr>
<td>Cs-137</td>
<td>9.4 X 10⁻¹</td>
<td>7.2 X 10⁻²</td>
<td>Around 30 years</td>
</tr>
</tbody>
</table>
### Inspection Status View of Trench, etc. at Fukushima Daiichi Nuclear Power Station (Preliminary Result)

**January 19, 2012**

Tokyo Electric Power Company

#### 【Inspection area】
Fukushima Daiichi Nuclear Power Station Unit 1-4, trenches etc. connected to the centralized radiation waste treatment facility building

<table>
<thead>
<tr>
<th>Date of Inspection</th>
<th>Place</th>
<th>Puddle</th>
<th>Surface dose rate</th>
<th>Result of nuclide analysis ( Bq/cm³ )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I-131</td>
</tr>
<tr>
<td>Jan. 11</td>
<td>DG connecting duct of Unit 2-4</td>
<td>Discovered</td>
<td>9.0μSv/h</td>
<td>ND</td>
</tr>
<tr>
<td></td>
<td>Connecting duct between water treatment building – Unit 1 T/B</td>
<td>Discovered</td>
<td>1.5μSv/h</td>
<td>ND</td>
</tr>
<tr>
<td>Jan. 12</td>
<td>Unit 1 chemical tank connecting duct</td>
<td>Discovered</td>
<td>1.2μSv/h</td>
<td>ND</td>
</tr>
<tr>
<td></td>
<td>Unit 3 cable duct for start-up transformer</td>
<td>Discovered</td>
<td>1.6μSv/h</td>
<td>ND</td>
</tr>
<tr>
<td></td>
<td>Unit 3 Radioactive Fluid Piping Duct</td>
<td>Not discovered</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Jan. 13</td>
<td>Unit 1 Radioactive Fluid Piping Duct</td>
<td>Discovered</td>
<td>9.0μSv/h</td>
<td>ND</td>
</tr>
<tr>
<td></td>
<td>Unit 4 Radioactive Fluid Piping Duct</td>
<td>Discovered</td>
<td>2.5μSv/h</td>
<td>ND</td>
</tr>
<tr>
<td>Jan. 16</td>
<td>Unit 1 Water Intake Power Cable Duct</td>
<td>Discovered</td>
<td>5.5μSv/h</td>
<td>ND</td>
</tr>
<tr>
<td>Jan. 17</td>
<td>Unit 1 Standby Power Cable Duct</td>
<td>Discovered</td>
<td>10 μSv/h</td>
<td>ND</td>
</tr>
<tr>
<td></td>
<td>Unit 2 Radioactive Fluid Piping Duct</td>
<td>Not discovered</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Unit 3 Chemical Tank Connection Duct</td>
<td>Not discovered</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Unit 4 Chemical Tank Connecting Duct</td>
<td>Discovered</td>
<td>3.0 μSv/h</td>
<td>ND</td>
</tr>
<tr>
<td>Jan. 18</td>
<td>Unit 1 Seawater Piping Tunnel</td>
<td>Discovered</td>
<td>1.3 ⋅ 10⁻¹</td>
<td>ND</td>
</tr>
<tr>
<td></td>
<td>Unit 1 Common Piping Duct</td>
<td>Discovered</td>
<td>1.0 ⋅ 10⁻¹</td>
<td>ND</td>
</tr>
<tr>
<td></td>
<td>Unit 1 Control Cable Duct</td>
<td>Discovered</td>
<td>4.5 ⋅ 10⁻¹</td>
<td>ND</td>
</tr>
<tr>
<td></td>
<td>Unit 4 Seawater Piping Duct</td>
<td>Not discovered</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>