## **Underground Reservoir Nuclide Analysis Results (As of April 23, 2013)**

|                       |  |                | Underground Reservoir (Drain hole water) |                |                |                |                |                |                |                |                |                |                |                |                |  |
|-----------------------|--|----------------|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--|
|                       |  | i              |  | ii             |                | iii            |                | iv             |                | V              |                | vi             |                | ٧              | /ii            |  |
|                       |  | Northeast side | Southwest side                           | Northeast side | Southwest side | Northeast side | Southwest side | Northeast side | Southwest side | Northeast side | Southwest side | Northeast side | Southwest side | Northeast side | Southwest side |  |
| Sampled time          |  | 5:30 AM        | 5:30 AM                                  | 5:40 AM        | 5:40 AM        | 5:50 AM        | 5:50 AM        | 6:00 AM        | 6:00 AM        | 6:10 AM        | 6:10 AM        | 6:20 AM        | 6:20 AM        | 6:30 AM        | 6:30 AM        |  |
| Chloride cor          | Chloride concentration (ppm)               |                | 5  | 9              | 6              | 7              | 4              | 10             | 8              | 8              | 8              | 10             | 7              | 6              | 8              |  |
|                       | I-131                                      | <3.2E-2        | <2.7E-2                                  | <2.7E-2        | <2.6E-2        | <3.0E-2        | <2.5E-2        | <2.8E-2        | <2.5E-2        | <2.7E-2        | <2.6E-2        | <2.0E-2        | <2.5E-2        | <2.6E-2        | <2.7E-2        |  |
| Radioactive           | Cs-134                                     | <5.8E-2        | <4.7E-2                                  | <5.3E-2        | <5.0E-2        | <5.6E-2        | <5.5E-2        | <5.3E-2        | <4.8E-2        | <4.9E-2        | <5.3E-2        | <5.5E-2        | <5.5E-2        | <5.0E-2        | <5.3E-2        |  |
| concentration         | Cs-137                                     | <6.7E-2        | <6.8E-2                                  | <6.9E-2        | <6.6E-2        | <7.0E-2        | <6.7E-2        | <6.8E-2        | <6.8E-2        | <6.9E-2        | <6.6E-2        | <6.7E-2        | <6.7E-2        | <6.7E-2        | <6.8E-2        |  |
|                       | γ nuclides other than the major 3 nuclides | I NII)         | ND                                       | ND             | ND             | ND             | ND             | ND             | ND             | ND             | ND             | ND             | ND             | ND             | ND             |  |
| (Bq/cm <sup>3</sup> ) | ΑΙΙ β                                      | 3.3E+1         | <3.2E-2                                  | 1.3E+1         | 2.5E-1         | 4.5E-2         | 1.2E-1         | <3.2E-2        | 3.3E-2         | 4.0E-1         | <3.2E-2        | <3.2E-2        | 5.4E-2         | 3.3E-2         | <3.2E-2        |  |

Half-life period I-131: Approx. 8 days, Cs-134: Approx. 2 years, Cs-137: Approx. 30 years

| Underground Reservoir (Leakage detector hole v |  |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
|--|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|  |  | i              |                | ii             |                | iii            |                | iv             |                | v /            |                | vi             |                | vii            |                |
|  |  | Northeast side | Southwest side |
| Sampled time                                   |  | 8:15 AM        | 8:20 AM        | 8:30 AM        | 8:35 AM        | Not sampled    | 8:53 AM        | 9:10 AM        | Not sampled    |                |                | 9:25 AM        | Not sampled    |                |                |
| Chloride cor                                   | ncentration (ppm)                          | 1100           | 8              | 22             | 11             |                | 18             | 11             |                |                |                | 8              |                |                |                |
|  | I-131                                      | <1.9E-1        | <2.4E-2        | <3.7E-2        | <2.4E-2        |                | <2.2E-2        | <2.9E-2        |                | /              | <b>/</b>       | <3.1E-2        |                | /              | 1              |
| Radioactive                                    | Cs-134                                     | <2.5E-1        | <5.0E-2        | <5.6E-2        | <5.0E-2        |                | <5.1E-2        | <5.5E-2        |                |                |                | <5.0E-2        |                |                |                |
| concentration                                  | Cs-137                                     | <1.2E-1        | <6.7E-2        | <7.1E-2        | <6.6E-2        |                | <6.6E-2        | <6.7E-2        |                |                |                | <6.7E-2        |                |                |                |
|  | γ nuclides other than the major 3 nuclides | 3.0E+1*        | ND             | ND             | ND             |                | ND             | ND             |                |                |                | ND             |                |                |                |
| (Bq/cm <sup>3</sup> )                          | All β                                      | 3.4E+4         | 4.1E-1         | 6.4E+2         | 8.9E-1         |                | 9.9E+1         | 1.5E-1         |                |                |                | 1.9E-1         |                |                |                |

Half-life period I-131: Approx. 8 days, Cs-134: Approx. 2 years, Cs-137: Approx. 30 years

(Note 1) O.OE±O is the same as O.O x 10<sup>±O</sup>.

(Note 2) The figures written next to "<" indicate the detection limit when the measurement result is below the detection limit.

(Note 3) "ND" indicates that the measurement result of  $\gamma$  nuclides other than the major 3 nuclides are below the detection limit.

<sup>\*</sup> Sb-125: 2.8E+1, Ru-106: 1.9E+0

## Underground Reservoir Observation Holes Nuclide Analysis Results (As of April 23, 2013)

|                              |               | Underground reservoir observation holes (i - iii) |          |          |          |               |                        |         |         |         |         |         |          |          |  |
|------------------------------|---------------|---|----------|----------|----------|---------------|------------------------|---------|---------|---------|---------|---------|----------|----------|--|
|                              | A1            | A2  | А3       | A4       | A5       | A6            | A7                     | A8      | A9      | A10     | A11     | A12     | A13      | A14      |  |
| Sampled time                 |               | 9:03 AM   | 11:15 AM | 10:50 AM | 11:15 AM |               | being _<br>_ drilled _ | 9:50 AM | 9:22 AM | 9:24 AM | 9:37 AM | 9:50 AM | 10:21 AM | 10:21 AM |  |
| Chloride concentration (ppm) | being drilled | 9   | 8        | 8        | 6        | being drilled |                        | 8       | 8       | 9       | 31      | 8       | 9        | 9        |  |
| All β(Bq/cm <sup>3</sup> )   | _             | <2.6E-2   | <2.6E-2  | <2.6E-2  | <2.6E-2  | _             |                        | <2.6E-2 | <2.6E-2 | <2.6E-2 | <2.6E-2 | <2.6E-2 | <2.6E-2  | <2.6E-2  |  |

|                              | Under    | ground rese | rvoir obser   | Underground reservoir observation holes (vi) |         |          |          |          |
|------------------------------|----------|-------------|---------------|--|---------|----------|----------|----------|
|                              | A15      | A16         | A17           | A18  | A19     | B1       | B2       | В3       |
| Sampled time                 | 11:36 AM | 10:31 AM    |               | 9:45 AM                                      | 9:23 AM | 10:45 AM | 11:20 AM | 10:50 AM |
| Chloride concentration (ppm) | 9        | 11          | being drilled | 11   | 9       | 12       | 5        | 7        |
| All β(Bq/cm <sup>3</sup> )   | <2.6E-2  | <3.2E-2     |               | <3.2E-2                                      | <3.2E-2 | <3.2E-2  | <3.2E-2  | <3.2E-2  |

(Note 1) O.OE $\pm$ O is the same as O.O x  $10^{\pm O}$ .

(Note 2) The figures written next to "<" indicate the detection limit when the measurement result is below the detection limit.

## Nuclide Analysis Results of the Underground Bypass (Investigation Holes/Pumping Well) and the Sea Side Observation Holes (As of April 23, 2013)

|                               | Underground bypass investigation holes |                      |                      | Undergr              | ound byp             | ass pump             | oing well            | Sea side observation holes |                      |                   |               |                  |               |                  |               |
|-------------------------------|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------------|----------------------|-------------------|---------------|------------------|---------------|------------------|---------------|
|                               | а                                      | b                    | C                    | 1                    | 2                    | 3                    | 4                    | 1                          | 2                    | 3                 | 4             | 5                | 6             | 7                | 8             |
| Sampled time                  | Outside of the scope                   | Outside of the scope | Outside of the scope | Outside of the scope | Outside of the scope | Outside of the scope | Outside of the scope | Outside of the scope       | Outside of the scope | 11:19 AM*         |               |                  |               |                  |               |
| Chloride concentration (ppm)  |  |                      |                      | -                    |                      | -                    | ·                    | -                          |                      | <1                | being drilled | being<br>drilled | being drilled | being<br>drilled | being drilled |
| Tritium (Bq/cm <sup>3</sup> ) |  |                      |                      |                      |                      |                      |                      |                            |                      | Under<br>analysis | _             | _                | _             | _                | _             |
| All β(Bq/cm <sup>3</sup> )    |  |                      |                      |                      |                      |                      |                      |                            |                      | <3.2E-2           |               |                  |               |                  |               |

Half-life period Tritium: Approx. 12 years

(Note 1) O.OE±O is the same as O.O x 10<sup>±O</sup>.

(Note 2) The figures written next to "<" indicate the detection limit when the measurement result is below the detection limit.

\*In the analysis results previously announced, it said the sampling at sea side observation holes ③ was conducted "at 1:19 PM", however, it has been corrected to "at 11:19 AM". We apologize for the mistake. (Corrected on May 2, 2013)