## Dec 24, 2013 Nuclides Analysis Result of the Sub-drain Water in the Surroundings of the Central Radioactive Waste Treatment Facility

I-131(Bq/cm3)

| I-131(Bd             | /cm <sup>+</sup> )   |         |          |         |          |         |         |          |          |         |          |          |         |         |          |          |      |   |   |             |
|----------------------|----------------------|---------|----------|---------|----------|---------|---------|----------|----------|---------|----------|----------|---------|---------|----------|----------|------|---|---|-------------|
| Sampling<br>Location | Dec 09               | Dec 00  | Dec 10   | Dec 11  | Dec 12   | Dec 12  | Dec 14  | Dec 15   | Dec 16   | Dec 17  | Dec 19   | Dec 10   | Dec 20  | Dec 21  | Dec 22   | Dec 22   |      |   |   | <del></del> |
|                      |                      |         |          |         |          |         |         |          |          |         |          |          |         |         |          |          |      |   |   |             |
| 1                    | ND                   | ND      | ND<br>ND | ND      | ND<br>ND | ND      | ND      | ND<br>ND | ND       | ND      | ND       | ND<br>ND | ND      | ••••••  | ND<br>ND | ND<br>ND | <br> |   |   | <b> </b>    |
| 2                    | ND<br>ND             | ND      |          | ND      |          | ND      | ND      |          | ND<br>ND | ND      | ND<br>ND | ND<br>ND | ND      | <b></b> | ND<br>ND | ND<br>ND | <br> |   |   | <b> </b>    |
| 3<br>④               | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       | <br> |   |   | <b> </b>    |
| 4)<br>(5)            | -<br>ND              | -<br>ND | -<br>ND  | -       | -<br>ND  | -       | -<br>ND | -<br>ND  | -<br>ND  | -<br>ND | -<br>ND  | -<br>ND  | -<br>ND | -<br>ND | -<br>ND  | -<br>ND  | <br> |   |   | <b> </b>    |
| 6                    | שא                   | ND      | UN       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | שא      | שא      | ND       | ND       | <br> |   |   |             |
|                      | -<br>ND              | ND      | -<br>ND  | -<br>ND | -<br>ND  | -<br>ND | -<br>ND | -<br>ND  |          | -<br>ND | -<br>ND  | -<br>ND  | -<br>ND | -<br>ND | -<br>ND  | ND       | <br> |   |   | <b> </b>    |
| ⑦<br>⑧               |                      |         |          |         |          |         |         |          | ND       |         |          |          | <b></b> | <b></b> | ND       |          | <br> |   |   | <b> </b>    |
|                      | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | <b></b> | ND       | ND       | <br> |   |   | <b> </b>    |
| 9                    | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       |      |   |   |             |
| s-134(E              | Bq/cm <sup>3</sup> ) |         |          |         |          |         |         |          |          |         |          |          |         |         |          |          |      |   |   |             |
| ampling              |                      |         | 1        | 1       | 1        | 1       |         |          | 1        | r       |          |          |         |         | 1        |          |      | 1 | 1 |             |
|                      |                      |         |          | Dec 11  |          |         |         |          |          |         |          |          |         |         |          |          |      |   |   |             |
| 1                    | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       | <br> |   |   | ļ           |
| 2                    | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       | <br> |   |   | ļ           |
| 3                    | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       | <br> |   |   | ļ           |
| 4                    | -                    | -       | -        | -       | -        | -       | -       | -        | -        | -       | -        | -        | -       | -       | -        | -        | <br> |   |   | <b>.</b>    |
| 5                    | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       | <br> |   |   | <b>.</b>    |
| 6                    | -                    | ND      | -        | -       | -        | -       | -       | -        | ND       | -       | -        | -        | -       | -       | -        | ND       | <br> |   |   | <b>_</b>    |
| 7                    | 0.055                | 0.057   | 0.052    | 0.062   | 0.045    | 0.057   | 0.061   | 0.044    | 0.067    | 0.054   | 0.055    | 0.062    | 0.047   | 0.047   | 0.04     | 0.049    | <br> |   |   |             |
| 8                    | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       | <br> |   |   |             |
| 9                    | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       |      |   |   |             |
| Cs-137(E             | 3q/cm <sup>3</sup> ) |         |          |         |          |         |         |          |          |         |          |          |         |         |          |          |      |   |   |             |
| Sampling             |                      |         |          |         |          |         |         |          |          |         |          |          |         |         |          |          |      |   |   |             |
| Location             | Dec 08               | Dec 09  | Dec 10   | Dec 11  | Dec 12   | Dec 13  | Dec 14  | Dec 15   | Dec 16   | Dec 17  | Dec 18   | Dec 19   | Dec 20  | Dec 21  | Dec 22   | Dec 23   |      |   |   |             |
| 1                    | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       |      |   |   |             |
| 2                    | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       | <br> |   |   |             |
| 3                    | ND                   | ND      | 0.023    | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       | <br> |   |   |             |
| 4                    | -                    | -       | -        | -       | -        | -       | -       | -        | -        | -       | -        | -        | -       | -       | -        | -        |      |   |   | <br>        |
| 5                    | ND                   | 0.02    | ND       | 0.016   | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       | <br> |   |   |             |
| 6                    | -                    | ND      | -        | -       | -        | -       | -       | -        | ND       | -       | -        | -        | -       | -       | -        | ND       |      |   |   | <br>        |
| 7                    | 0.11                 | 0.14    | 0.15     | 0.13    | 0.11     | 0.12    | 0.13    | 0.13     | 0.16     | 0.12    | 0.13     | 0.13     | 0.12    | 0.11    | 0.095    | 0.11     | <br> |   |   |             |
| 8                    | 0.029                | 0.027   | 0.018    | 0.024   | ND       | 0.025   | 0.029   | 0.03     | ND       | 0.023   | 0.025    | 0.025    | ND      | 0.034   | 0.019    | 0.018    | <br> |   |   |             |
| 9                    | ND                   | ND      | ND       | ND      | ND       | ND      | ND      | ND       | ND       | ND      | ND       | ND       | ND      | ND      | ND       | ND       | <br> |   |   |             |
| )                    | -                    | _       |          | _       | _        |         | _       |          | _        | _       | _        | _        |         |         |          | _        |      |   |   | <u> </u>    |

\* Hyphen "-" indicates that neither sampling nor measurement was implemented.

\* 6 was selected as a sampling location in the upstream of groundwater (sampling done once a week starting from April 29, 2011) since it became unable to do sampling at ④.

\* Sampling at ⑦ (located in the downstream of the groundwater) has been done since May 26, 2011.

\* Samping at (8) since May 30, 2011

\* Sampling at (9) has been done since August 2, 2011

\* "ND" indicates that the measurement result is below the detection limit.

I-131: Approx. 0.009Bq/cm<sup>3</sup>, Cs-134: Approx. 0.01Bq/cm<sup>3</sup>, Cs-137: Approx. 0.02Bq/cm<sup>3</sup> (December 23, 2013)

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

## <Place of Sampling>

① Southeast of Unit 4 Turbine Building

- 2 Northeast of the Process Main Building
- 3 Southeast of the Process Main Building

(4) Southwest of the Process Main Building

- (5) South Part of the Miscellaneous Solid Waste Volume Reduction Treatment Building
- 6 Southwest Part of the On-site Bunker Building
- ⑦ West Side of the Incineration Workshop Building
- North Part of the Miscellaneous Solid Waste Volume Reduction Treatment Building
- (9) Southeast Part of the On-site Bunker Building