Americium and Curium analysis result of ocean soil

1. Analysis result

(Unit: Bq/kg·dry soil)

| Place of sampling | Date of sampling/ Analyses organization | Pu-238 ^{*1} | Pu-239*1 Pu-240*1 | U-234 ^{*2} | U-235 ^{*2} | U-238 ^{*2} | Am-241 | Cm-242 | Cm-243 Cm-244 |
|--|--|------------------------------------|---------------------------------|--------------------------|---------------------------------|--------------------------------|--------------------------------------|------------------------------------|------------------------------------|
| 3km offshore of Odaka Ward | June 2/ Japan Chemical Analysis Center | N.D. [<1.1 × 10 ⁻²] | (4.3 ± 0.27) × 10^{-1} | (4.7+0.30) × 10^{0} | (1.9 ± 0.50) × 10^{-1} | (4.5 ± 0.29) × 10^{0} | (1.4 ± 0.15) × 10^{-1} | N.D. [<1.4 × 10 ⁻²] | N.D. [<1.3 × 10 ⁻²] |
| 3km offshore of Iwasawa shore | | N.D. [<1.3 × 10 ⁻²] | (4.5 ± 0.29) × 10^{-1} | (6.4± 0.42) ×10° | (3.8 ± 0.90) × 10^{-1} | (6.7 ± 0.43) × 10^{0} | (1.4 ± 0.15) $\times 10^{-1}$ | N.D. [<1.5 × 10 ⁻²] | N.D. [<1.5 × 10 ⁻²] |
| Average nuclide concentration ratio of Unit $1 \sim 3$ (ratio in case Pu-238 as 1) *3 | | 1 | - | - | - | - | 0 . 1 | 1 0 | 1 |

^{*1:} Announced on June 23, 2011

2. Evaluation

Detected Am can not be considered to be caused by the nuclear accident of this time for the following reasons.

- Detected Pu-239 and Pu-240 are within the measured value in the past (1999 ~ 2008) around the marine area of Fukushima Daiichi and Fukushima Daini.
- Detected U-234, U-235 and U-238 can be evaluated as same level as they exist naturally.
- Nuclide of Cm-242, Cm-243 and Cm-244, which do not exist in the natural world were not detected.

^{*2:} Announced on July 7, 2011

^{*3:} Calculated value by ORIGEN code (Approximate figure)