## Results of ALPS Treated Water Marine Monitoring: Seawater Survey (tritium) (November 2023)

## 1 Outline of survey

- (1) Date of sampling November 1, 2023
- (2) Sampling points
  - 3 sampling points on coastal waters in the Fukushima Prefecture.
  - \* Water samples are collected from surface and bottom layers at all sampling points.
- (3) Detail of the survey
  - The measurement of radioactive material concentrations in seawater. (tritium) Analysis with target lower limit of detection of 0.1 Bq/L.
  - \*A target lower limit of detection means a value that is set for quality control to assure at least the detection up to the value when analysis is conducted. Each actual lower limit of detection differs according to samples, and is equal to or lower than a target lower limit of detection.

## 2 Outline of results

(1) Seawater survey (3 sampling points (6 samples))

Concentrations of tritium in seawater range from 0.094 Bq/L to 0.15 Bq/L.

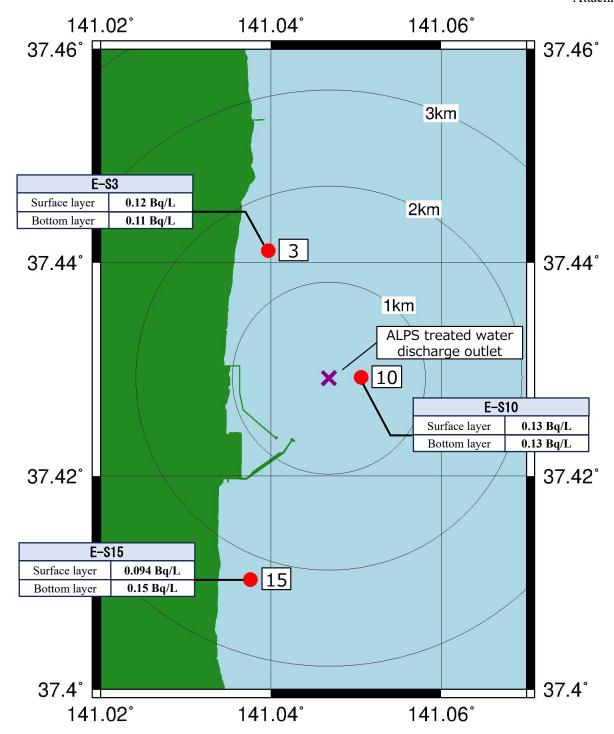
(Detailed are attached)
(Maps attached)

## Analysis result for tritium in seawater

| Sampling point | Sampling date | Sampling layer | Sampling depth (m) | Nuclide | Radioactivity concentration*1*2 |   |       | Unit |
|----------------|---------------|----------------|--------------------|---------|---------------------------------|---|-------|------|
| E-S3           | 2023/11/01    | Surface layer  | 1.5                | H-3     | 0.12                            | ± | 0.013 | Bq/L |
| E-S3           | 2023/11/01    | Bottom layer   | 7.5                | Н-3     | 0.11                            | ± | 0.012 | Bq/L |
| E-S10          | 2023/11/01    | Surface layer  | 1.5                | Н-3     | 0.13                            | ± | 0.013 | Bq/L |
| E-S10          | 2023/11/01    | Bottom layer   | 13.8               | Н-3     | 0.13                            | ± | 0.013 | Bq/L |
| E-S15          | 2023/11/01    | Surface layer  | 1.5                | Н-3     | 0.094                           | ± | 0.013 | Bq/L |
| E-S15          | 2023/11/01    | Bottom layer   | 7.5                | Н-3     | 0.15                            | ± | 0.013 | Bq/L |

<sup>\*1</sup> Radioactivity concentrations are presented as radioactivity concentration  $\pm$  combined standard uncertainty.

<sup>\*2</sup> Values below detection limit are shown by lower limit of detection (e.g.,"<10 Bq/L" indicates a value below 10 Bq/L).



\*Numbers in the map show sampling points this time, and "E-S" is omitted from labels in the map (e.g., E-S3 is marked as 3)

Fig. 1: Sampling points within 3 km of ALPS treated water discharge outlet