

Evaluation of Environment Radiation Monitoring Results

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Nuclear Safety Commission

Nuclear Safety Commission (NSC) evaluates the Environmental Monitoring Results published by Ministry of Education, Culture, Sports, Science and Technology (MEXT). The evaluation results based on the information published on June 6 and 7, 2011 are described as below:

1. Ambient radiation dose around Fukushima Dai-ichi NPP

- Observation of ambient radiation dose rate at 20km or more far from Fukushima Dai-ichi NPP found a relatively higher dose rate locally at several measuring points. It however does not reach the level that affects people's health.
- Regarding ambient radiation dose rate within 20km radius range of Fukushima Dai-ichi NPP, a relatively higher dose rate was observed in northwestward.
- A part of area where the integrated dose was high value, and annual cumulative dose after the onset of the accident would potentially reach 20mSv was set to be "Deliberate Evacuation Area".

We need to further watch a variation of dose rate carefully, considering other factors such as weather and wind direction.

2. Dust sampling in the air around Fukushima Dai-ichi NPP

- With regard to the measuring result of the dust sample collected at 20km or more far from Fukushima Dai-ichi NPP on June 4 and 5, neither I-131, Cs-134, Cs-137, I-132, Te-132 nor others was detected.

We need to further watch a variation of dust sampling data carefully, considering other factors such as weather and wind direction.

3. Airborne monitoring

- No additional information was published regarding the airborne monitoring result.

4. Environmental sample around Fukushima Dai-ichi NPP

- Monitoring results collected between June 3 and 5 were obtained on the land water (pond or rain), soil and fallout. Weed and land water still showed relatively higher values; we further need continued measurement on the drinking water (tap water) and foods.

- Results of analysis of Strontium were added to monitoring results on the soil. It seems that detected Strontium was released from Fukushima Dai-ichi NPP, because Sr-89 with a short half-life period was detected.
- For both Cs-134 and Cs-137 within 30km radius range in off-shore of Fukushima, the data sampled at the closest to Fukushima Dai-ichi NPP on June 4 were higher than the concentration limit (Note1).

For the aquatic products, be aware of the information announced by the Ministry of Health, Labor and Welfare (MHLW) regarding relevant intervention.

We also need to continue environmental monitoring by related organizations under the arrangement by MEXT, considering various elements such as weather change.

5. Environmental radioactivity level survey by prefecture

1) Ambient radiation dose rate

Some prefectures showed a higher value compared with the average values obtained before the accident, however, it does not affect people's health.

2) Drinking water (tap water)

- Be aware of the information related announced by the MHLW regarding relevant intervention.
- Neither radioactive iodine nor radioactive cesium was detected as far as the data on radioactivity level in drinking water by prefecture published by MEXT.

We consider that further monitoring is needed on a continuous basis.

(Note)

(Note 1) Limits of the radioactivity in the water outside the peripheral monitoring area boundary as specified by the law are $4 \times 10^{-2} \text{Bq/cm}^3$ (40Bq/L) for I-131, $6 \times 10^{-2} \text{Bq/cm}^3$ (60Bq/L) for Cs-134, $9 \times 10^{-2} \text{Bq/cm}^3$ (90Bq/L) for Cs-137, $3 \times 10^{-1} \text{Bq/cm}^3$ (300Bq/L) for Sr-89 and $3 \times 10^{-2} \text{Bq/cm}^3$ (30Bq/L) for Sr-90.