

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 between June 10 and 12, 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.
- 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 between June 7 and 10, 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 5 and 11 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.

- With regard to the measuring results of seawater collected around Fukushima Dai-ichi NPP and at off-shore of Ibaraki prefecture between June 3 and 10, Cs-134 and Cs-137 were detected at some points at the closest to and within 30km radius range in nuclear power plants. Moreover, Cs-134 and Cs-137 were detected at some points about 30km to 50km south of nuclear power plants. However, they were lower than the concentration limit (Note1). I-131 was not detected at all points.
- With regard to the measuring results of sea ground soil collected at off-shore of Miyagi, Fukushima and Ibaraki prefecture and around Fukushima Dai-ichi NPP between May 23 and June 2, Cs-134, Cs-137 and others were detected.

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.