Results of the Measurement (Wide-area Monitoring using Unmanned Helicopters) under the Radiation Monitoring Action Plan for Supporting Restoration of the Former Emergency Evacuation Preparation Areas (Minami Soma City, Tamura City, Kawauchi Village, Hirono Town, and Naraha Town)

January 13, 2012
Team in Charge of Assisting the Lives of Disaster Victims, Cabinet Office
Emergency Operation Center, MEXT
Ministry of the Environment

1. Outline

In light of the fact that the enhancement of the monitoring is requested in the restoration plan of five municipalities for which the designation of emergency evacuation preparation areas was removed on September 30, 2011 (Minami Soma City, Tamura City, Kawauchi Village, Hirono Town, and Naraha Town), the Ministry of Education, Culture, Sports, Science and Technology, the Team in Charge of Assisting the Lives of Disaster Victims of the Cabinet Office, the Local Nuclear Emergency Response Headquarters, the Ministry of the Environment, etc. has been conducting the following monitoring surveys since September as part of the measures to support restoration of these areas, while making adjustments with related municipalities and Fukushima prefecture.

(i) Wide-area monitoring by way of vehicle-borne survey and survey using unmanned helicopters, focusing on people's living areas

(ii) Monitoring in response to individual requests from municipalities

a. Monitoring of underground water, such as drinking well water (newly introduced)

b. Monitoring of river water and water resources (newly introduced)

We have compiled the measurement results of part of the monitoring conducted in December and release them as follows.

2. Outline of the measurement results to be released

2.1 Wide-area monitoring by way of vehicle-borne survey and survey using unmanned helicopters, focusing on people's living areas

1) Outline of the measurement

From the perspective of supplementing the measurement results in July, 2011, air dose rates were measured by way of vehicle-borne surveys and surveys using unmanned helicopters at community roads and *satoyama* (village-vicinity woodlands), focusing on people's living areas. (This time, the measurement results for Minami Soma City using unmanned helicopters are released.)

2) Measurement target

○ Wide-area monitoring using unmanned helicopters

Measurement at *satoyama*, etc. strongly requested by municipalities: 4 locations in Minami Soma City

3) Measurement results

As a result of monitoring using unmanned helicopters, at almost all the area covered by unmanned helicopter No. 2 and at all the area covered by unmanned helicopter No.4, relatively high air dose rates exceeding 3.8μSv/h were detected at the height of 1m above the ground. At the areas covered by unmanned helicopters No. 1 and No.3, measured air dose rates at the height of 1m above the ground were around 2μSv/h and around 3μSv/h, respectively.

Out of air dose rates at the height of 1m above the ground measured this time, the maximum was 10.9μSv/h, which was detected in a forest covered by unmanned helicopter No. 4 (near the border of the planned evacuation area), and the minimum was 1.6μSv/h, which was detected in a forest covered by unmanned helicopter No. 1.

Air dose rates at the height of 1m above the ground

1.6μSv/h (unmanned helicopter No. 1) to 10.9μSv/h (unmanned helicopter No. 4)

Air dose rates at the height of 50cm above the ground

1.6μSv/h (unmanned helicopter No. 1) to 11.0μSv/h (unmanned helicopter No. 4)

Based on these results, we prepared a (i) radiation distribution map compiling the measurement results of the current monitoring and a (ii) radiation distribution map compiling the measurement results of the current monitoring together with the results of the monitoring under the Radiation Monitoring Action Plan toward the Removal of the Designation of Emergency Evacuation Preparation Areas conducted in July (the revised version of the said results was released on December 27).*

* When preparing the map combining past measurement results, although measurement dates are different, values actually obtained through the measurement are used without attenuation compensation

(Composition)

○ Radiation Distribution Map at the Former Emergency Evacuation Preparation Areas

Radiation Distribution Maps at the Former Emergency Evacuation Preparation Area (Minami Soma City) (Air Dose Rates)

(i) Radiation distribution map compiling the measurement results of the current monitoring

(ii) (Reference) Radiation distribution map combining past measurement results

(Attachment) Radiation Monitoring Action Plan for Supporting Restoration of the Former Emergency Evacuation Preparation Areas (Minami Soma City, Tamura City, Kawauchi Village, Hirono Town, and Naraha Town) (Extract)

[October 3, 2011; Team in Charge of Assisting the Lives of Disaster Victims (Cabinet Office), Emergency Operation Center (MEXT), and Ministry of the Environment]