Concerning the Preparation of Distribution Map of Radiation (Revised Version) for the Former Emergency Evacuation Preparation Areas (Minami Soma city, Tamura city, Kawauchi village, Hirono town, and Naraha town)

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1. Outline

On September 30, 2011, the designation of emergency evacuation preparation areas was removed for five municipalities (Minami Soma city, Tamura city, Kawauchi village, Hirono town, and Naraha town). In response, MEXT, Team in Charge of Assisting the Lives of Disaster Victims, the Cabinet Office, Local Nuclear Emergency Response Headquarters, the Ministry of the Environment, etc. have been conducting various types of monitoring through 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)" and the "Radiation Monitoring under the Action Plan toward the Removal of the Designation of Emergency Evacuation Preparation Areas" with the coordination of the related municipalities and Fukushima prefecture, etc. and have compiled these results and announced them (August 9, August 16, November 15).

The distribution map of radiation that has been compiled through the results of wide-area monitoring measurement of air dose rates of the major points using unmanned helicopters and vehicle-borne surveys focusing on major points and living areas has been publicized. However, from the viewpoint of making it more usable, a distribution map of radiation (revised version) has been prepared and announced them, in which the display method for the air dose rate has been revised. Through displaying the distribution of the air dose rate on the map in more detail, it is expected that its usability will be enhanced further.

2. Outline of measurement distribution map of radiation (revised version)

In preparing the distribution map of radiation (revised version)* it has been created through combining the measurement results derived from the monitoring survey conducted in the former Emergency Evacuation Preparation Areas as given below. With regard to the display of the air dose rate below 1.0 μSv/h, it was given only as "0 – below 1.0 μSv/h" in the previous versions. However, in the current version, this has been split into four sections: "0 – below 0.1 μSv/h," "0.1 – below 0.2μSv/h," "0.2 – below 0.5μSv/h," and "0.5 – below 1.0μSv/h." Furthermore, if a measurement had been conducted in the same area, the latest measurement result is displayed.

1) Air dose rates in major points under the "Radiation Monitoring under the Action Plan toward the Removal of the Designation of Emergency Evacuation Preparation Areas" with a vehicle-borne survey focusing on major points and wide-area monitoring utilizing unmanned helicopters that was conducted in July (announced on August 9. August 16. September 22)
2) A vehicle-borne survey and wide-area monitoring focusing on living areas 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)" that was conducted from September to November (wide-area monitoring of Tamura city, Hirono town and Naraha town was announced on November 15, 2011)

*In preparing the revised distribution map of radiation, the actual measurement result was taken on the measurement date without conducting attenuation compensation to take into account the difference in the measurement date.

Through the distribution map of radiation (revised version,) it has become possible to observe a more detailed distribution of the air dose rate in areas with less than 1.0 μSv/h. For example, we can observe a lot of areas with an air dose rate of "0.5 – below 1.0μSv/h" in the southeastern part of Hirono town, Naraha town and Tamura city.

Through the revised distribution map of radiation, the distribution of air dose rates has become more definitive on the map, and it is expected to be used more extensively, including as reference material for consideration in drawing up the implementation plan for decontamination.

<Reference> Highest and lowest values for air dose rate per monitoring for each municipality

(unit: μSv/h)

	Measured height	Minami Soma city	Tamura city	Kawauchi village	Hirono town	Naraha town
Vehicle-borne survey	1m height	0.1–4.2*1	0.2–3.6*1	0.2–2.0*1	0.1–2.0*2	0.2–1.8*2
	50cm height	0.1–4.7*1	0.3–4.0*1	0.2–2.2*1	0.1–2.1*2	0.2–2.0*2
Unmanned helicopter	1m height		0.2–1.4*2	0.3–0.9*1	0.3–1.0*1,2	
	50cm height		0.2–1.4*2	0.3–0.9*1	0.3–1.0*1,2	

*1 Displaying the measurement result from the "Radiation Monitoring under the Action Plan toward the Removal of the Designation of Emergency Evacuation Preparation Areas" that was conducted in July

*2 Displaying the measurement result from 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)" that was conducted in September and October