# Strengthening of Monitoring in Response to the "Enforced Plan on Environmental Monitoring"

May 11, 2011

Ministry of Education, Culture, Sports, Science and Technology

Environmental monitoring will be strengthened as follows in response to the "Enforced Plan on Environmental Monitoring."

# 1. Land area monitoring

- (1) Increasing the monitoring points
  - (i) The number of fixed monitoring points within the Planned Evacuation Zone (PEZ) will be increased from the current 15 to 71, and air dose rates will be monitored at these points once a week, in principle.
  - (ii) In areas outside the PEZ where air dose rates are relatively high and in municipalities within the 20–30 km zone of the NPP, the number of fixed monitoring points will be increased from the current 32 to 54, and air dose rates will be monitored at these points once a week, in principle. Also, based on the future monitoring results and the conditions of the surrounding areas, consideration will be made to further increase the number of fixed monitoring points as needed.
  - (iii) The number of fixed monitoring points within the 20 km zone will be 50, and air dose rates will be monitored at these points once a week, in principle.
  - (iv) Twenty units of portable monitoring posts that allow for real-time monitoring will be installed.

# (2) Optimizing monitoring points

Any monitoring point that have been shown readings of 1  $\mu$ Sv/h or less and is close to another monitoring point will be consolidated with the close monitoring point, and air dose rates at the consolidated point will be monitored.

# (3) Other

Although results of soil analyses to date indicate that radioactive strontium is present in soil in far smaller abundance than radioactive cesium (about one-thousandth of the amount of cesium), which suggests that radioactive strontium dose not easily disperse on land, analyses will be carried out on the levels of radioactive strontium and cesium in soil sampled at about

ten locations in various directions from the NPP in order to identify their distribution tendencies.

# 2. Airborne monitoring

Based on the "Enforced Plan on Environmental Monitoring," MEXT conducted aerial radiation surveys in cooperation with the U.S. Department of Energy, and published the survey results for April 6 to April 29.

Airborne monitoring will continue to be implemented in the future in order to identify the dose distribution in a wide area. The areas to be monitored will be decided in coordination with related organizations (Nuclear Safety Commission, Nuclear and Industrial Safety Agency, Ministry of Agriculture, Forestry and Fisheries (MAFF), etc.).

# 3. Sea area monitoring

The sea monitoring area will be expanded to include not only an area off Fukushima Prefecture, but also areas off Miyagi and Ibaraki Prefectures (within approximately 300 km of the NPP). In addition, based on the analysis results of the levels of radioactive cesium in seawater and sea-bottom soil in areas 30 km or more away from the NPP, the levels of radioactive strontium (at about five locations in total) will be analyzed in order to identify its distribution tendency in the sea area..

- 4. Maps of distributions of radiation doses, etc.
- (1) The monitoring points additionally installed according to 1. (1) above will be included when making a dose rate map and an accumulated dose estimation map. An accumulated dose map will also be made showing the accumulated dose up to the monitoring date.
- (2) Surface soil samples will be collected in a wide area covering Fukushima Prefecture, including the locations of the monitoring points indicated in 1. (1) above, and a map showing the distribution of radioactive substances in surface soil will be made. The soil will be sampled and analyzed in cooperation with related organizations, including MAFF, Japan Atomic Energy Agency, and universities.

As for the map-making schedule, a preliminary distribution map will be made by early August this year, before the monitoring of radioactive iodine becomes difficult due to radioactive decay, and the final distribution map after the termination of discharge of radioactive substances will be made after the discharge terminates.

(Referance)

Reading Point	from Fukushima Dai-ichi NPP	
	Direction	Distance
(1) Planned Evacuation Zone		
Minami Soma city Haramachi ward Takakura	North/West	27km
Minami Soma city Haramachi ward Baba	North/West	21km
Date county Kawamata town Yamakiya Mukaideyama	West/North/West	34km
Date county Kawamata town Yamakiya Oonukari	West/North/West	40km
Date county Kawamata town Yamakiya	West/North/West	40km
Date county Kawamata town Yamakiya	North/West	37km
Date county Kawamata town Yamakiya	West/North/West	34km
Date county Kawamata town Yamakiya	North/West	33km
Futaba county Namie town Tsushima Nakaoki	West/North/West	30km
Futaba county Namie town Akougi Teshichirou	North/West	31km
Futaba county Namie town Tsushima Taikougi	West/North/West	30km
Futaba county Namie town Akougi Ishikoya	North/West	31km
Futaba county Namie town Akougi Kunugidaira	North/West	24km
Futaba county Namie town Akougi	North/West	31km
Futaba county Namie town Akougi	North/West	28km 28km
Futaba county Namie town Akougi Futaba county Namie town Akougi	North/West North/West	26km
Futaba county Namie town Akougi Futaba county Namie town Hirusone	North/West	22km
Futaba county Namie town minamitsushima	North/West	25km
Futaba county Namie town minamitsushima	North/West	23km
Futaba county Namie town shimotsushima	North/West	27km
Futaba county Namie town shimotsushima Futaba county Namie town Hastuke	North/West West/North/West	29km 33km
Soma county litate Village Yagisawa	North/West	36km
Soma county litate Village Kusano Taishido	North/West	39km
Soma county litate Village Nimaibashi	North/West	44km
Soma county litate Village Itamizawa	North/West	39km
Soma county litate Village Itamizawa	North/West	39km
Soma county litate Village Kusano	North/West	39km
Soma county litate Village Fukaya	North/West	41km
Soma county litate Village Fukaya	North/West	41km
Soma county litate Village Fukaya Soma county litate Village Usuishi	North/West North/West	41km 42km
Soma county litate Village Nimaibashi	North/West	44km
Soma county litate Village Maeta	North/West	45km
Soma County litate Village Sasu	North/West	46km
Soma County litate Village Sasu	North/West	46km
Soma County litate Village Sasu	North/West	43km
Soma county litate Village Maeta	North/West	43km
Soma county litate Village Kusano	North/West	40km
Soma county litate Village Okura	North/West	40km
Soma county litate Village Okura	North/West	40km
Soma county litate Village Kusano	North/West	38km
Soma county litate Village Yagisawa	North/West	36km
Soma county litate Village Sekisawa	North/West	38km
Soma county litate Village Sekisawa  Soma county litate Village Sekisawa	North/West	36km
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Soma county litate Village Komiya		
Soma county litate Village Komiya	North/West	35km
Soma county litate Village Komiya	North/West	36km
Soma county litate Village Komiya	North/West	32km

Soma county litate Village Warabidaira	North/West	29km
Soma county litate Village Nagadoro	North/West	31km
Soma county litate Village Nagadoro	North/West	33km
Soma county litate Village Hiso	North/West	34km
Soma county litate Village Hiso	North/West	38km
Soma county litate Village litoi	North/West	40km
Soma county litate Village litoi	North/West	38km
Soma county litate Village litoi	North/West	37km
Futaba county Katsurao Village Kaminogawa	West/North/West	32km
Futaba county Katsurao Village Oaza Ochiai aza Ochiai	North/West	25km
Futaba county Katsurao Village Katsurao	West/North/West	32km
Futaba county Katsurao Village Katsurao	West/North/West	30km
Futaba county Katsurao Village Katsurao	West/North/West	28km
Futaba county Katsurao Village Nogawa	West/North/West	28km
Futaba county Katsurao Village Nogawa	West/North/West	29km
Futaba county Katsurao Village Katsurao	West/North/West	27km
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Futaba county Katsurao Village Katsurao	North/West	23km
Futaba county Katsurao Village Katsurao	North/West	21km
Futaba county Katsurao Village Ochiai	West/North/West	21km
Futaba county Katsurao Village Ochiai	West/North/West	24km
Futaba county Katsurao Village Ochiai	West/North/West	21km
(2)Other Areas		
Date city Ryozen town Ishida Hikohei	North/West	46km
Date city Ryozen town Ishida Hojizawa	North/West	48km
Date city Ryozen town Oishi aza Minowa	North/West	55km 50km
Date city Tsukidate town Date city Ryozen town Shimooguni	North/West North/West	55km
Date city Ryozen town Grimooguni  Date city Ryozen town Kamioguni	North/West	55km
Date city Ryozen town Kamioguni	North/West	55km
Fukushima city Sugitsuma town	North/West	62km
Fukushima city Onami Takinoiri	North/West	56km
Fukushima city Arai Harajiku	West/North/West	66km
Fukushima city Hikarigaoka	West/North/West	55km
Fukushima city Kitayanome	North/West	66km
Fukushima city Irie town	North/West	62km
Fukushima city Kasuga town	North/West	63km
Fukushima city Shinhama town Fukushima city Sugitsuma town	North/West North/West	63km 62km
Fukushima city Sugitsuma town Fukushima city Hamada town	North/West	61km
Fukushima city Koshihama town	North/West	61km
Fukushima city Watari	North/West	61km
Fukushima city Oguraji	North/West	59km
Nihonmatsu city Harimichi Nakajima	West/North/West	44km
Nihonmatsu city Ota aza Shimoda	West/North/West	43km
Nihonmatsu city Tazawa Hagidaira	West/North/West	37km
Nihonmatsu city Tazawa	West/North/West	36km
Nihonmatsu city Shimokawasaki	West/North/West West/North/West	50km
Motomiya city Wada Koriyama city Otsuki town Chouemonbayashi 1	West/North/West West	52km 63km
Koriyama city Toyota town	West	60 k m
Koriyama city Hayama	South/West	59km
Koriyama city Kaisei	South/West	59km
Tamura city Miyakoji town Furumichi Teranomae 2 6	West	21km
Tamura city Miyakoji town Furumichi Teranomae 14	West	25km
Iwaki city Ohisa town Ohisa Yanomezawa	South/South/West	28km
lwaki city Ogawa town Kamiogawa	South/West	26km

lwaki city Kawamae town Ojiroi aza Syokangoya	South/West	30km
Futaba county Naraha town Yamadaoka Utsukushimori	South	20km
Futaba county Hirono town Shimokitaba Nawashirogae	South	23km
Futaba county Kawauchi Village Kamikawauchi Hayawata 11 - 24	West/South/West	22km
Futaba county Kawauchi Village Kamikawauchi Hananouchi 6	West/South/West	29km
Futaba county Kawauchi Village Shimokawauchi Miyawata 2 9	West/South/West	22km
Minami Soma city Kashima ward Nishimachi	North	32km
Minami Soma city Haramachi ward Takami town	North	24km
Minami Soma city Haramachi ward Taka Mamegarauchi	North	20km
Minami Soma city Haramachi ward Ohara Daihata 28	North/North/West	30km
Minami Soma city Haramachi ward Takanokura	North/North/West	25km
Minami Soma city Haramachi ward Baba	North/North/West	22km
Minami Soma city Haramachi ward Kanezawa	North	20km
Minami Soma city Haramachi ward Takami town	North	24km
Minami Soma city Haramachi ward Taka	North/North/West	21km
Minami Soma city Haramachi ward Ohara	North/North/West	29km
Date county Kawamata town oaza Tsurusawa aza Kawabata	North/West	47km
Date county kawamata town Tsurusawa	North/West	48km
Date county kawamata town Kotunagi	North/West	42km
Date county kawamata town Kotunagi	North/West	42km