Our Approaches for Monitoring Radioactive Materials and Developing Decontamination Technology

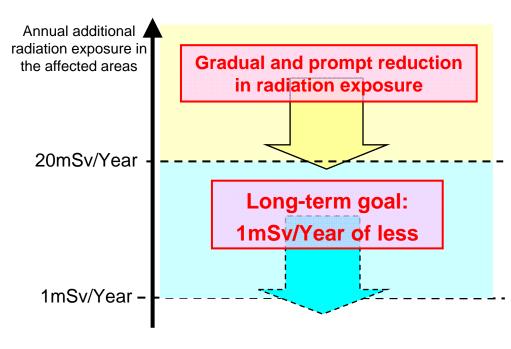
1. Act on Special Measures Concerning the Handling of Pollution by Radioactive Materials & Action toward Decontamination

June 15, 2012
Tokyo Electric Power Company



Our Basic Stance on Decontamination

Decontamination implementation plan will be developed with priority given to the areas at high risk of radiation exposure, especially the living environment of children. Necessary decontamination measures will be taken depending on the radiation dose. Decontamination of agricultural areas must take into account the conditions for resuming production. The goal of decontamination will be set based on the recommendations from the International Commission on Radiological Protection (ICRP).



Areas where the annual radiation exposure exceeds far beyond 20mSv/Year

More specific goal will be set based on the effectiveness of decontamination measures and the outcome of the model projects.

Specific goal

The following goals to be achieved by the end of August 2013.

- 1. Reduce the annual additional radiation exposure of the general public by 50% (of that at the end of August 2011).
- 2. Reduce the annual additional radiation exposure of children by 60% (of that at the end of August 2011).
- * This ratio includes the natural radioactive decay (including decay induced by factors such as rain and wind) which accounts for approx. 40% of the radiation exposure reduction.



1. Act on Special Measures Concerning the Handling of Pollution by Radioactive Materials: Area designation

Decontamination Special Area

Decontamination to be conducted by the government

Fukushima prefecture
(11 municipalities)

- -Evacuation Zone and Planned Evacuation Zone (Naraha town, Tomioka town, Okuma town, Futaba town, Namie town, Katsurao village, litate village)
- -Areas designated as the evacuation zone or planned evacuation zone in Tamura city, Minamisoma city, Kawamata town and Kawauchi village

Decontamination Area

Decontamination to be conducted by municipalities. The decontamination plan will be developed based on the discussion with the Minister of Environment.

Areas subject to an intensive investigation of contamination

Iwate pref. (3)	Ichinoseki city, Oshu city, Hiraizumi city
Miyagi pref. (9)	Ishinomaki city, Shiroishi city, Kakuda city
Fukushima pref. (41)	Fukushima city, Koriyama city, Iwaki city, etc.
Ibaraki pref. (20)	Hitachi city, Tsuchiura city, Ryugasaki city, etc.
Tochigi pref. (8)	Nikko city, Ohtawara city, Nasushiobara city, etc.
Gunma pref. (12)	Kiryu city, Numata city, Shibukawa city, etc.
Saitama pref. (2)	Misato city, Yoshikawa city
Chiba pref. (9)	Matsudo city, Kashiwa city, Nagareyama city, etc.
Total (104)	



Decontamination Area

Specific contamination plan will be set for the areas where the radiation exposure is 0.23 μ Sv/h or higher.

* All these areas on the left may not necessarily be "decontamination area"



Source: Documents issued by the Ministry of the Environment

2. Outline of Decontamination Roadmap (Announced on January 26, 2012) -1

Decontamination Policy for the Decontamination Special Area (Decontamination conducted by the government)

Areas to which evacuation orders are ready to be lifted

20mSv/Year or less

Areas where radiation exposure is $\underline{10-20mSv/Year}$: Decontamination to be implemented by the end of $\underline{2012}^*$. (For schools, 5mSv/Year (1 μ Sv/h) or higher)

Areas where radiation exposure is <u>5-10mSv/Year</u>: Decontamination to be implemented <u>by the end of March</u> 2013*.

Areas where radiation exposure is <u>1-5mSv/Year</u>: Decontamination to be implemented <u>by the end of March</u> 2014*.

For the areas where radiation exposure is 10mSv/Year or more, the goal of decontamination will be less than 10mSv/Year for the time being. For schools, the decontamination goal will be $1 \mu Sv/h$ or less (the criteria for schools to be resumed).

Areas in which the residents are not permitted to live

more than 20mSv and 50mSv/Year or less

Decontamination will be implemented during the period of 2012 to 2013*. The level of radiation exposure will be reduced gradually and promptly for the areas where the radiation exposure is 21-50mSv/Year.

*Decontamination will be commenced upon agreement with residents and securing the temporary storage for the radioactive waste.

Areas where it is expected that residents will face difficulties in returning for a long time

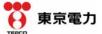
more than 50mSv/Year

Model projects will be implemented for some time to come.



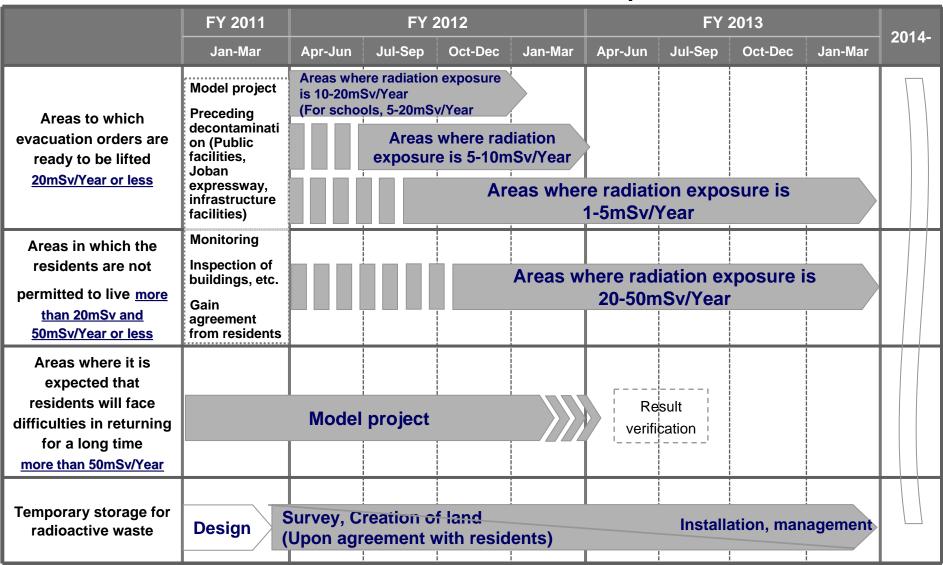
Based on the findings acquired from decontamination model projects and preceding decontamination (at government offices, etc.), the decontamination plan will be developed by the end of 2012.

Source: Documents issued by the Ministry of the Environment



2. Outline of Decontamination Roadmap (Announced on January 26, 2012) -2

Decontamination Schedule for the Decontamination Special Area



^{*}The decontamination schedule for each municipality must be developed with flexibility upon discussion with stakeholders.



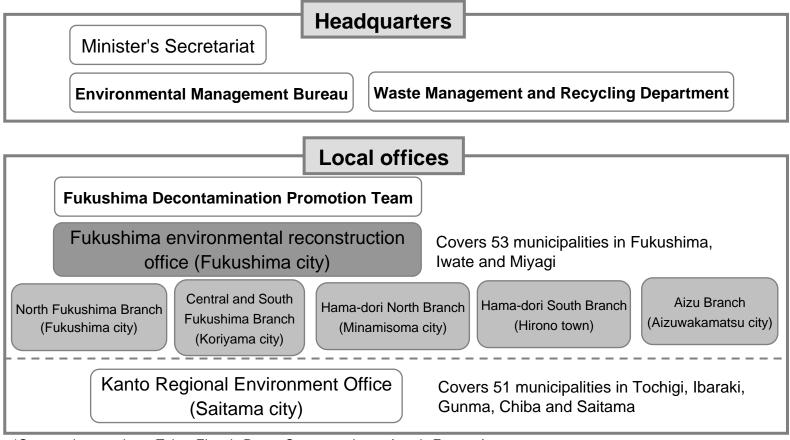
3. Decontamination Schedule for Some Time to Come

		FY 2011 (JanMar. 2012) FY 2012 (AprJun.) (Jul)	
	n Special asures	Jan. 1, 2012: Act on Special Measures Concerning the Handling of Pollution by Radioactive Materials came into effect	
	Plan	Develop the decontamination implementation plan Implementation plans for Tamura city, Naraha town and Kawauchi village and Minamisoma city will be announced in April 2012. The plan for litate village will be announced in May 2012.	
Dec	Model project	Model demonstration project Model project in high radiation dose areas	
Decontamination	Preceding econtaminatio	Government offices and community centers (Naraha town, Tomioka town, Katsurao village, Kawauchi village, Okuma town, etc.)	
at:		Joban expressway (model project), infrastructure facilities such as water and sewage facilities	
Special		Confirmation/grasp of stakeholders	
		Briefing for residents	
	Decontamination	Monitoring and investigation of buildings, etc.	
		Gain agreement with residents	
		Decontamination Decontamination	
Decontamination Area		Dec. 2011: Area designation	
		Individual investigation, develop the implementation plan, consider target areas, coordinate with municipalities and residents	
	try of the	environmental reconstruction office reconstruction office reconstruction office	



4. Organization of the Ministry of the Environment Related to Act on Special Measures Concerning the Handling of Pollution by Radioactive Materials (April 2012-)

500 people from the Ministry of the Environment (headquarters, local offices in Fukushima and Kanto region) and cooperative members*



^{*}Cooperative members: Tokyo Electric Power Company, Japan Atomic Energy Agency

141 TEPCO employees designated as "decontamination promotion members" by the Ministry of the Environment (as of June 1, 2012) engage in tasks related to decontamination. *Including temporary cooperative members.

About 70 members are stationed at local sites.

