

Guidelines on Maintaining and Improving Health of Emergency Workers at the TEPCO Fukushima Daiichi Nuclear Power Plant

Section 1. Purpose

For workers presently or previously engaged in the emergency work designated by the Minister of Health, Labour and Welfare (MHLW Notification No. 402 of 2011 pursuant to Para.1, Article 59-2 of Ordinance on Prevention of Ionizing Radiation Hazards, hereinafter referred to as “designated emergency work”) at the TEPCO Fukushima Daiichi Nuclear Power Plant resulting from the Great East Japan Earthquake on 11 March 2011, hereinafter referred to as “emergency workers, etc.” Due to be heightened concern for late onset diseases such as cancer, emergency workers who demonstrated above maximum levels of exposure to radiation after everyday radiation work during the period of designated emergency work should be provided with appropriate measures for health care. Continuous medical examination conducted on a long-term basis even after workers leave their job, might help mitigate fear of potential risks in these workers.

In accordance with Para.1, Article 70-2 of the Industrial Safety and Health Act (Item no. 57, 1972, hereinafter referred to as “the Act”), these guidelines establish principles for implementing measures for health care of workers who have engaged in the designated emergency work or radiation works, hereinafter referred to as “emergency work, etc.” so that employers would strive toward taking appropriate and effective measures that minimize potential risks in these workers. It also establishes the needed measures for long-term health care appropriate for emergency workers, etc. after they leave radiation work. Furthermore, the guidelines clarify the Japanese government’s role in protecting health and safety of workers involved in emergency work by defining specific measures for implementation.

Section 2. Actions for the long-term health care

1. Establishment of an on-site health care system

Employers which assigned their employees to emergency work, excluding small and medium sized employers who assign emergency workers, etc. to non-emergency work, should establish an on-site health care system with a health and safety committee that constitutes appropriate numbers of health officers, industrial medical doctors, public health nurses, and other professionals based on the scale of the site. The employers are expected to conduct general medical examination (the Act, Art. 66, para.1) as well as the ionizing radiation medical examination stipulated in Article No. 56 of the Ordinance on Prevention of Ionizing

Radiation Hazards (MHLW Ordinance No. 41, 1972, hereafter referred to as “Ionizing Radiation Ordinance,”) in order to manage long-term health care of emergency workers.

2. Cancer screening

(1)Employers should provide slit-lamp microscope examination for cataracts approximately once a year for emergency workers, etc. who have been exposed to effective doses between the ranges of 50 mSv to 100 mSv while they were engaged in the designated emergency work. Taking the photographs of their lenses is recommended in these examinations. This rule should not apply in cases where the relevant workers opt out of taking such examination.

(2)Employers should provide the following examination to emergency workers, etc. who have been exposed to an effective dose higher than 100 mSv while they were engaged in the designated emergency work, approximately once a year in addition to the examination described in (1). However, this should not apply in cases where the relevant workers opt out of taking such examination. The white blood cell count, differential leukocyte count, red cell count, and hemoglobin content should be identified from blood samples taken from emergency workers at the routine general medical examination.

Type of examination	Examination items
Thyroid examination	1) Levels of Thyroid stimulation hormone (TSH), free triiodothyronine (free T3), free thyroxine (free T4) from blood samples 2) Neck ultrasound if determined necessary based on the aforementioned blood test results and radiation exposure doses
Gastric cancer screening	Gastric fluoroscopy examination or gastric endoscopy examination
Lung cancer screening	Lung X-ray and sputum cell examination
Large intestine cancer screening	fecal occult blood tests

(3)Employers should fully explain the details and the necessity of the aforementioned examinations in (1) and (2) in advance to all employees expected to take these examinations.

3. Health guidance, etc.

(1)When employers provide health guidance through medical doctors or public health nurses to emergency workers, etc. in accordance with the “Guidelines on Steps to Be Taken by

Employer Based On Medical Examination Results” (Guideline on Measures Based on Medical Examination Results –bulletin No. 7, 31 January 2008), ionizing radiation medical examination and the cancer screenings specified in the section 2 above should be given full consideration

- (2) Considering the urgent nature of emergency work that is different from regular radiation work and its impact on mental health of emergency workers, etc., employers should provide health consultations including mental health consultations if requested by emergency workers, etc.. When employers provide consultations, employers should refer to “the Guideline on Maintaining and Improving Mental Health of Workers” (the Guideline on Health Maintenance and improvement– bulletin No. 3, 31 March 2006).
- (3) The results of the general and ionizing radiation medical examination should be used by employers in making employment related decisions for workers who had alarming remarks in the results of relevant examinations while considering medical doctors’ opinion in accordance with Art.66-4 of the Act. However, it should be noted that the results of cancer screening specified in the section 2 above should be used only for the purpose of re-examination, detailed analyses, or giving recommendations for further treatment and not for determining employment actions.
- (4) In order to protect the health information relevant to these guidelines including results of general and ionizing radiation medical examination and health guidance, employers should be mindful of MHLW notification No. 259 in 2004 “Guidelines on Measures Taken by Employers to Ensure an Appropriate Handling of Personal Information Relating to Employment Management”.

Section 3. Development of a database for the long-term health care of emergency workers, etc.

1. Development of a database

- (1) Employers who assign their employees to emergency work, etc. should report on the following items to the Japanese government in accordance with Article 59-2 of the Ionizing Radiation Ordinance. This includes employers who assigned their employees to the designated emergency work before the partial amendment of the Ordinance to become in effect (MHLW Notification No. 129 in 201.1).
 - (a) Results of medical examination
 - i) Results of ionizing radiation medical examination conducted pursuant to Article 57 of the Ordinance
 - ii) Results of general medical examination conducted pursuant to Articles 44 and 45 of the Industrial Safety and Health Act
 - iii) Results of special medical examination conducted pursuant to Para. 4, Art. 66 of the

Act

(b)Matters specified in the “status report on radiation dose control, etc.” (Form Number 3, Ionizing Radiation Ordinance)

i) Names and addresses of workers and names of employers

ii) Radiation exposure dose before, during, and after designated emergency work and radiation work

(2)In the case where employers provided medical examinations except for those cases described in 3-(1) above such as the cancer screening delineated in Section 2-2, they should report the examination results including diagnoses and other details subject to the approval of the examinees.

(3)Emergency workers, etc. should receive written documents along with the cards which prove registration of their detailed information in the database established by the Japanese government in order to record and store the results of the examinations described in (1) and (2). This card that attests to registration of specific information to the Japanese government will be hereinafter referred to as “registration card.”

Emergency workers, etc. should be able to receive copies of their own records including exposed radiation doses and medical examination results by presenting their registration cards to a desk established to support those workers (hereinafter referred to as “support desk”).

(4)Emergency workers, etc. who fall into the categories described in Section 2-2-(1) and (2) above (hereinafter referred to as “designated emergency workers, etc.) should be able to receive a handbook for recording radiation exposure dose, for “designated emergency workers, etc.” which documents the key matters of (1) and (2) above (hereinafter referred to as “Handbook”). They should also be able to have any additional details updated in their Handbook at any time at the support desk.

2. Measures for assigning emergency workers, etc. to new radiation work

(1) Employers who assign new workers to radiation work should find at the time of hiring that any of those workers fall into the category of emergency worker, etc. upon investigating their radiation exposure history when ionizing radiation medical examination were performed, they should report to the Japanese government as provided in Section 3-1 above, in accordance with Article 59-2 of the Ordinance on Prevention of Ionizing Radiation Hazards. In addition, they must implement appropriate health care measures as specified in 2 above, according to the levels of radiation exposure dosereceived during the designated emergency work.

(2) Employers should obtain approval from the designated emergency workers, etc. in

advance for checking the results of their past medical examinations and use the information to support their health guidance and consultations.

Section 4. Support by the government to ensure appropriate and effective implementation of measures for maintaining and improving health of emergency workers, etc.

1. Recommendation for cancer screening

About once a year, the government should notify the designated emergency workers, etc. through their employers and give recommendation to take cancer screening and other relevant tests to these workers according to the radiation exposure doses as delineated in Section 2-2. The employers may contact other workers directly.

2. Health guidance by the Japanese government

The government provides health consultations or guidance to emergency workers, etc. at the support desks.

3. Support for the designated emergency workers, etc.

- (a) When the designated emergency workers, etc. not currently engaged in work receive general medical examination and examinations equivalent to each of those listed in Section 2-2 above, the government should finance the examination expense in whole or in part.
- (b) When the designated emergency workers, etc. currently assigned by employers to work on duties other than emergency work, etc. (only for small to medium employers that assigned workers to the designated emergency work) receive general medical examination and examinations equivalent to each of those listed in Section 2-2 above, the government should finance the examination expense in whole or in part.
- (c) The government should receive the results of the above examinations including diagnoses and remarks of medical doctors from the medical institutions that conducted these examinations.

4. In addition to 1-3 above, the government may provide the support deemed necessary in order to expedite appropriate and effective measures for maintaining and promoting health of the designated emergency workers, etc.