

Results of supervision and instruction activities for employers of workers engaged in decommissioning of the TEPCO Fukushima Daiichi Nuclear Power Plant

The Fukushima Prefectural Labour Bureau (Director: Mutsuo Hikichi) is focusing on conducting inspections and providing instructions to the employers of workers engaged in decommissioning of the TEPCO Fukushima Daiichi Nuclear Power Plant required due to the Great East Japan Earthquake (hereinafter referred to as “Decommissioning Work”) for the purpose of ensuring the working conditions and industrial safety and health of these workers. Here, we present the summarized results of such supervision and instruction activities conducted from 11 March 2011 to 30 September 2015.

Overview of results of supervision and instruction activities

- The number of employers for which supervision has been carried out **724**
Among the above, those employers which violated laws and regulations related to the labour standards **409** (Violation rate: **56.5%**)

- The number of violation cases **656**
 - Working condition-related **406**
(Such as regarding clarification of extra pay, working hours and working conditions etc.)
 - Safety/Health-related **250**
(Measuring radiation exposure dose, using protective gear, reporting medical examination results, etc.)
 - Among the above, violations of the Ordinance on Prevention of Ionizing Radiation Hazards and related ordinances **113**
 - Violations of the Industrial Safety and Health Act and related ordinances **137**

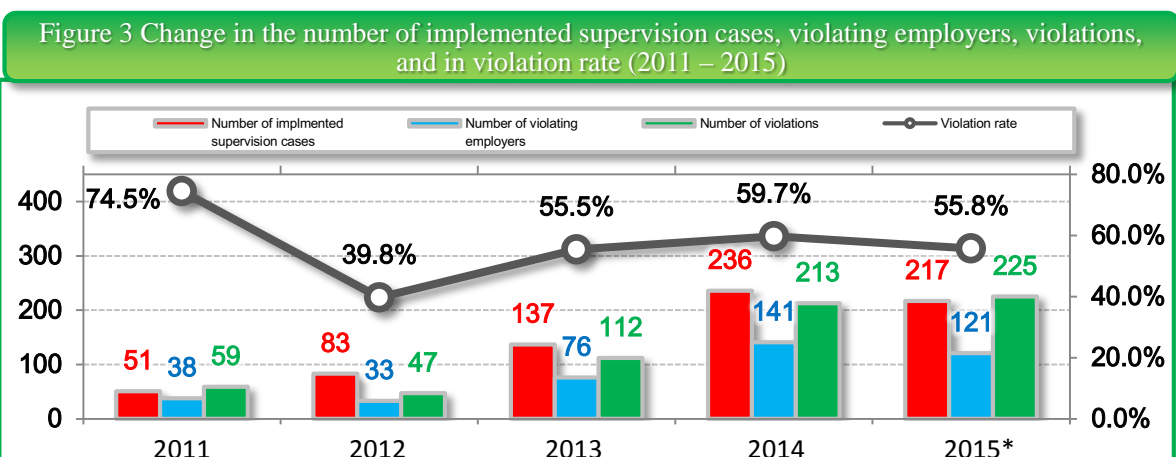
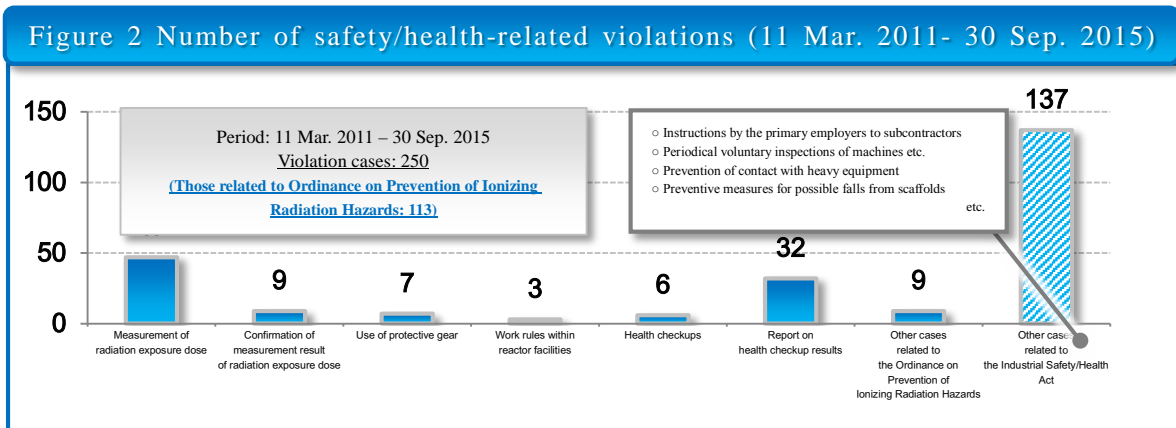
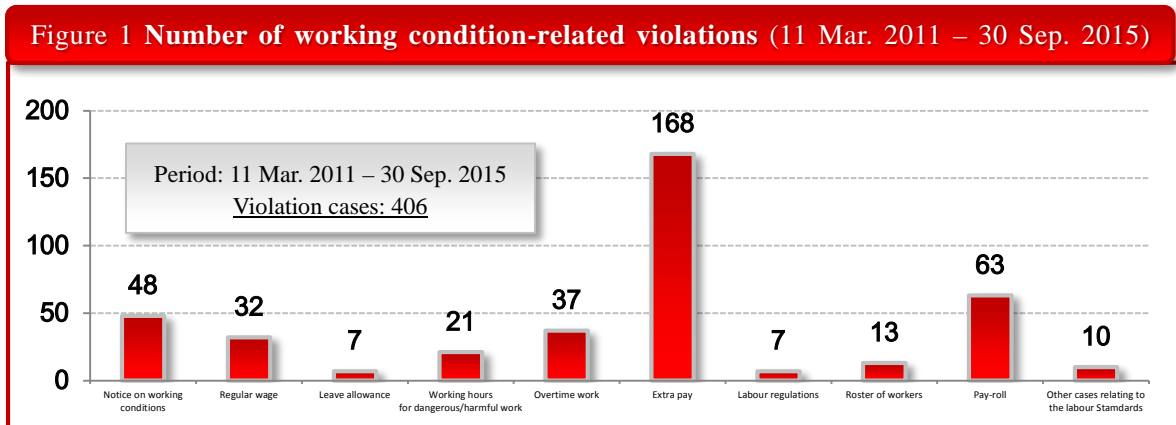
The Fukushima Prefectural Labour Bureau will continue to conduct focused supervision and instruction activities for the employers of workers engaged in “Decommissioning Work” and request the employers to thoroughly comply with the related laws and regulations and to take appropriate measures stipulated in “Guidelines on occupational safety and health management at the TEPCO Fukushima Daiichi Nuclear Power Plant” formulated on 26 August 2015.

1 Results of supervision and instruction

(1) The Fukushima Prefectural Labour Bureau has conducted supervision and instruction activities. **The number of employers for which such activities were conducted was 724.** Among these, **the number of employers who violated the “Labour Standards Act” and the “Industrial Safety and Health Act” in some form were 409 (Violation rate: 56.5%).**

Those employers were given instructions to correct the violations.

The number of violation cases was 656, of which the number of working conditions-related violation cases was **406 (Figure 1)** with cases related to (i) payment of extra wages (Article 37, Labour Standards Act), (ii) preparation of the wage ledger (Article 108 of the same Act), (iii) delivery of notices on working conditions (Article 15 of the same Act) and so on, and the number of industrial safety/health-related violations was **250 (those related to the Ordinance on Prevention of Ionizing Radiation Hazards: 113) (Figure 2)** with cases related to (i) measuring radiation exposure dose (Article 8 of the Ordinance), (ii) reporting medical examination results (Article 58 of the Ordinance), (iii) checking measurement results of radiation exposure dose (Article 9 of the Ordinance). (Refer to Material 2 for details, and Material 3 for provisions of the related laws and regulations.)



*The figures in 2015 are the total numbers up to 30 September 2015.

(2) The **major violation cases** found in 2015 are as follows:

<Working conditions-related cases>

- When workers were employed, the documents describing the working conditions (Notice on Working Conditions) had no descriptions on the conditions of “amount of wages,” “amount of allowances,” “renewal of fixed-term employment contract” and so on (Article 15 of the Labour Standards Act)
- Dormitory fees/food expenses, etc. were deducted from the wages without any labour-management agreement. (Article 24 of the Act)
- Overtime work that exceeds 8 hours a day and 40 hours a week was imposed to workers without any labour-management agreement and its notification. (Article 32 of the Act)
- (i) No extra wages, calculated at the rate of no less than 25% of the overtime jobs carried out over 40 hours a week, were provided.
(ii) In calculating the unit price of extra wages various allowances, such as hazardous work allowance, were excluded, and the unit price was calculated only on the basis of the regular wages.
(iii) No extra wages, calculated at the rate of no less than 25% of the late-night work carried out from 10:00 pm to 5:00 am, were provided. (Article 37 of the Act)
- The wage ledger had no description on “working days” or “working hours”, which were legally required entry items. (Article 108 of the Act)

<Industrial Safety/Health-related cases>

- The report on the ionizing radiation medical examination results was not submitted to the head of the Labour Standards Inspection Office with jurisdiction.
(Article 58 of the Ordinance on Prevention of Ionizing Radiation Hazards)
- Periodical self-inspections of vehicle-type construction machines (drag shovels etc.) were not conducted. (Article 167 of the Industrial Safety and Health Ordinance etc.)
- No hazard preventive measures for possible contact between worker and a drag shovel to be used for drilling work were not implemented. (Article 158 of the Ordinance)
- On the external scaffolding which had been installed in order to perform the painting work of the outer wall, fall protection measures of workers from a work place on the scaffolding having a height of 2 m or more with a working floor were insufficient. (Article 563 of the Ordinance)

2 Other major efforts (in 2015)

- (1) Demanded TEPCO take actions to prevent recurrence of fatal accidents
(16 January and 15 September 2015)
- (2) Conducted group guidance for TEPCO and primary employers on establishment of the industrial safety and health management system
(27 October 2015)
- (3) Attended the “Committee on measures for industrial safety and health in the Fukushima-prefecture safety monitoring council on nuclear power station decommissioning”
- (4) Attended the “On-site adjustment meeting for decommissioning and contaminated water” (monthly)
- (5) Demanded TEPCO take actions to implement preventive measures for heat stroke
(25 May and 7 August 2015)

Table 1 Current status of supervision/instructions

Items	Period	2011	2012	2013	2014	2015	Total
		Mar. to Dec.	Jan. to Dec.			Jan. to Sep.	
Number of supervised employers		51	83	137	236	217	724
Number of violators		38	33	76	141	121	409
Violation rate (%)		74.5	39.8	55.5	59.7	55.8	56.5
Number of violation cases		59	47	112	213	225	656
	Working conditions-related	0	18	71	138	179	406
	Safety/health-related	59	29	41	75	46	250

Table 2 Details of major violations

(1) Violations of the Labour Standards Act

Provisions	Item	Period	2011	2012	2013	2014	2015	Total
			Mar. to Dec.	Jan. to Dec.			Jan. to Sep.	
Article 15	Clarification of working conditions		0	6	3	14	25	48
Article 24	Payment of regular wages*		0	0	5	11	16	32
	(Major breakdowns) Deduction of social activities fees, accommodation costs or food costs without a labour-management agreement		0	0	3	7	8	18
	No payment of wages for the hours spent for the medical examinations and the monitoring of internal exposure		0	0	0	3	0	3
Article 26	Payment of allowance for absence from work		0	0	0	0	7	7
Article 32	Statutory working hours		0	0	7	7	23	37
Article 36	Working hours for health hazard work		0	0	18	3	0	21
Article 37	Payment of premium wages		0	5	21	81	61	168
Article 107	Preparation of roster of workers		0	3	4	2	4	13
Article 108	Preparation of wage ledger		0	4	12	13	34	63

* As violations falling under respective categories of the "Major breakdown" are counted individually and the types of violations are not limited to those "Major breakdown" categories, the numbers of cases in "Payment of regular wages" and the total number of cases of the "Major Breakdown" categories do not match.

(2) Violations of the Industrial Safety and Health Act and the Ordinance on Prevention of Ionizing Radiation Hazards

Provisions (SH Act)	Provisions (Ordinance on Prevention of Ionizing Radiation Hazards)	Item	Period	2011	2012	2013	2014	2015	Total
				Mar. to Dec.	Jan. to Dec.			Jan. to Sep.	
Article 22	Article 8	Measurement of radiation exposure dose		38	2	7	0	0	47
	Article 9	Confirmation of measurement results of radiation exposure dose		0	0	0	6	3	9
	Article 38	Respiratory protective equipment		3	0	2	2	0	7
	Section 12, Article 41	Work rules within reactor facility		0	0	3	0	0	3
Article 66	Article 56	Provision of special medical examinations		0	1	5	0	0	6
Article 100	Article 58	Report on medical examination results		0	11	6	13	2	32

(3) Violations of the Industrial Safety and Health Act and the Industrial Safety and Health Ordinance

Provisions (SH Act)	Provision (SH Ordinance)	Items	Period	2011	2012	2013	2014	2015	Total
				Mar. to Dec.	Jan. to Dec.			Jan. to Sep.	
Article 14	Article 18	Communication of name of chief worker, etc.		0	0	0	1	4	5
Article 20	Article 563	Construction of scaffolds		0	0	1	0	3	4
Article 23	Article 540	Passages		0	1	0	1	1	3
Article 29	-	Measures that primary employers need to implement		9	7	7	22	15	60
Article 45	Article 167	Periodic voluntary inspection of vehicle-type construction machines		0	0	0	1	2	3
Article 66	Article 45	Medical examinations for workers engaged in specific tasks		0	4	1	0	0	5

A List of Provisions from the Related Laws

Labour Standards Act (Extracted)

(Clear Indication of Working Conditions)

Article 15.

1. In concluding a labour contract, the Employer shall clearly indicate the Wages, working hours and other working conditions to the Worker. In this case, matters concerning Wages, working hours and other matters stipulated by Ordinance of the Ministry of Health, Labour and Welfare shall be clearly indicated in the manner prescribed by Ordinance of the Ministry of Health, Labour and Welfare.
2. In the event that the working conditions clearly indicated under the provisions of the preceding paragraph differ from actual fact, the Worker may immediately cancel said labour contract.
3. In cases under the preceding paragraph, in the event that a Worker who has changed his or her residence for the purpose of work returns home within 14 days from the date of contract cancellation, the Employer shall bear the necessary travel expenses on behalf of the Worker.

(Payment of Wages)

Article 24.

1. Wages shall be paid in currency and in full directly to Workers; provided, however, that payment other than in currency may be permitted in cases otherwise provided for by laws and regulations or collective agreement, or in cases where a reliable method of payment of Wages defined by Ordinance of the Ministry of Health, Labour and Welfare is provided for; and partial deduction from Wages may be permitted in cases otherwise provided for by laws and regulations or in cases where there exists a written agreement with a labour union organized by a majority of the Workers at the workplace (in cases where such labour union exists), or with a person representing a majority of the Workers (in cases where such labour union does not exist).
2. Wages shall be paid at least once a month on a definite date; provided, however, that this shall not apply to extraordinary Wages, bonuses, and their like as defined by Ordinance of the Ministry of Health, Labour and Welfare (referred to as "Special Wages etc." in Article 89).

(Allowance for Absence from work)

Article 26.

In the event of an absence from work for reasons attributable to the Employer, the Employer shall pay an allowance equal to at least 60 percent of the Worker's average Wage to each Worker concerned during said period of absence from work.

(Working Hours)

Article 32.

1. Employers shall not have Workers work more than 40 hours per week, excluding rest periods.
2. Employers shall not have Workers work more than 8 hours per day for each day of the week, excluding rest periods.

(Overtime Work and Work on Days Off)

Article 36.

1. If an Employer has entered into a written agreement either with a labour union organized by a majority of the Workers at the workplace (in cases where such labour union exists) or with a person representing a majority of the Workers (in cases where such union does not exist) and has notified the relevant government agency of such agreement, the Employer may, notwithstanding the provisions with respect to working hours stipulated in Articles 32 through 32-5 or Article 40 (hereinafter in this Article referred to as "Working Hours") or the provisions with respect to days off stipulated in the preceding Article (hereinafter in this paragraph referred to as "Days Off"), extend the Working Hours or have Workers work on Days Off in accordance with the provisions of said agreement; provided, however, that the extension of Working Hours for belowground labour and other work particularly harmful to health as stipulated by Ordinance of the Ministry of Health, Labour and Welfare shall not exceed 2 hours per day.

(Paragraph 2 and the rest omitted)

(Premium Wages for Overtime Work, Work on Days Off and Night Work)

Article 37.

1. If an Employer extends the working hours or has a Worker work on a day off pursuant to the provisions of Article 33 or paragraph 1 of the preceding Article, the Employer shall pay Premium Wages for work during such hours or on such days at a rate no less than the rate stipulated by cabinet order within the range of no less than 25 percent and no more than 50 percent over the normal Wage per working hour or working day; provided, however, that in cases when extended working hours exceed 60 hours per month, the Employer shall pay Premium Wages for the excess working hours at a rate not less than 50 percent over the normal Wage per working hour.
2. The cabinet order set forth in the preceding paragraph shall be set taking into consideration the welfare of Workers, the trends of overtime work and of work on days off, and any other relevant circumstances.
3. If an Employer stipulates that they will grant Workers entitled to Premium Wages under the provisions of the proviso of paragraph 1 leave for which the normal Wage per working hour is paid instead of paying them Premium Wages (excluding annual paid leave under the provisions of Article 39) as provided for by Ordinance of the Ministry of Health, Labour and Welfare, pursuant to a written agreement either with a labour union organized by a majority of the Workers at the workplace concerned ((in cases where such a labour union exists), or with a person representing a majority of the Workers (in cases where such a labour union does not exist), if any such Worker takes such leave, the Employer is not required to pay Premium Wages under the provisions of the proviso of said paragraph for work performed during the hours prescribed by Ordinance of the Ministry of Health, Labour and Welfare as hours corresponding to such leave taken for said work in excess of the hours stipulated in the proviso of said paragraph.
4. In the event that an Employer has a Worker work between 10 p.m. and 5 a.m. (or between 11 p.m. and 6 a.m., in cases when the Minister of Health, Labour and Welfare recognizes the necessity of the application of those hours at a certain area or time of year), the Employer shall pay Premium Wages for work during such hours at a rate no less than 25 percent over the normal Wage per working hour.
5. Family allowances, commutation allowances, and other elements of Wages as stipulated by Ordinance of the Ministry of Health, Labour and Welfare shall not be added to the base Wages underlying the Premium Wages set forth in paragraph 1 and the preceding paragraph.

(Roster of Workers)

Article 107.

1. Employers shall prepare a roster of Workers for each workplace with respect to each Worker (excluding day labourers) and shall enter the Worker's name, date of birth, personal history, and other matters as set forth by Ordinance of the Ministry of Health, Labour and Welfare.
2. In the event of a change in any of the matters entered pursuant to the provisions of the preceding paragraph, the Employer shall make a correction without delay.

(Wage Ledger)

Article 108.

Employers shall prepare a Wage ledger for each workplace and shall enter the facts upon which Wage calculations are based, the amount of Wages, and other matters as set forth by Ordinance of the Ministry of Health, Labour and Welfare without delay each time Wage payments are made.

Industrial Safety and Health Act (Extracted)

(Measures to Be Taken by Employers, etc.)

Article 22.

The employer shall take necessary measures for preventing health impairment as follows:

- (1) Health impairment due to raw materials, gases, vapors, dusts, insufficient oxygen in air, pathogens, etc.
- (2) Health impairment due to radiation, high temperatures, low temperatures, ultrasonic waves, noises, vibration, abnormal atmospheric pressure, etc.
- (3) Health impairment due to operations such as gauge monitoring, precision work, etc.
- (4) Health impairment due to exhaust fumes, waste fluid or solid wastes.

(Measures to Be Taken by Principal Employers)

Article 29.

1. The principal employer shall give necessary guidance lest the related contractors and the workers employed by the related contractors should contravene the provisions of this Act or Ordinances issued thereunder with respect to the said work.
2. The principal employer shall, where he recognizes that the related contractors or workers employed by them have contravened the provisions of this Act or ordinances issued thereunder with respect to the said work, give the instruction necessary for rectification.
3. The related contractors or workers employed by the related contractors who have received the said instruction under the preceding paragraph shall follow the said instruction.

(Medical Examination)

Article 66.

1. The employer shall, as provided for by the Ordinance of the Ministry of Health, Labour and Welfare, have medical examinations of workers conducted by a physician.
2. The employer shall, as provided for by the Ordinance of the Ministry of Health, Labour and Welfare, have medical examinations on specified items conducted by a physician on the workers engaged in harmful work operations defined by Cabinet Order. The same shall apply to the workers who have engaged in harmful work operations defined by Cabinet Order and are currently in employment.

(Paragraph 3 and the rest omitted)

(Record of Results of Medical Examinations)

Article 66-3.

The employer shall, according to the Ordinance of the Ministry of Health, Labour and Welfare, record the results of medical examinations under the provisions of paragraph 1 to 4 and proviso in paragraph 5 of Article 66, and the preceding Article.

(Report, etc.)

Article 100.

1. The Minister of Health, Labour and Welfare, the Director of the Prefectural Labor Bureau or the Chief of the Labor Standards Office may, when they find it necessary for the enforcement of this Act, have the employer, worker, machine-lessor, building-lessor or consultant report on necessary matters or order them to appear, as prescribed by the Ordinance of the Ministry of Health, Labour and Welfare.

(Paragraph 2 and the rest omitted)

Ordinance on Prevention of Ionizing Radiation Hazards (Extracted)

(Exposure Dose Limit for Radiation Workers)

Article 4.

Employers shall ensure that the effective dose received by workers engaged in radiation works in a controlled area (hereinafter referred to as "radiation workers") does not exceed 100 mSv per five years and 50 mSv per one year.

2. Regardless of the provisions in the preceding paragraph, employers shall ensure that the effective dose received by female radiation workers (excluding female workers who were diagnosed with no possibility of pregnancy and those specified in Article 6) does not exceed 5 mSv per three months.

(Dose Limit in Emergency Works)

Article 7.

When carrying out emergency works to protect workers from health hazards due to radiation (hereinafter referred to as "emergency works") in the event of an accident that falls under any of the items of Paragraph 1 of Article 42, and in which an area as prescribed in the said Paragraph is generated, notwithstanding the provisions of Paragraph 1 of Article 4, and of Article 5, the employer may allow male radiation workers and female radiation workers who were diagnosed with no possibility of pregnancy to be exposed to doses that exceed the limit prescribed in such paragraphs.

2. In the event of any procedures under the preceding paragraph, the exposure dose during any such emergency works shall not exceed the value set in the following items as prescribed for each of the classifications below.
 - (1) 100 mSv for the effective dose.
 - (2) 300 mSv for the equivalent dose exposure to the eye lens.
 - (3) 1 Sv for the equivalent dose exposure to the skin.
3. The provision of the preceding paragraph shall be applied mutatis mutandis to male workers and female workers who were diagnosed with no possibility of pregnancy who engage in emergency works except radiation workers.

(Dose Measurements)

Article 8.

Employers shall measure the doses due to external and internal exposures received by radiation workers, emergency workers and workers who enter the controlled area temporarily, in the controlled area.

2. The dose due to external exposure provided for in the preceding paragraph shall be measured with the units of 1 cm dose equivalent and 70 μ m dose equivalent (in the case of neutron-rays, 1 cm dose equivalent). However, in accordance with the provisions of the following paragraph, the measurement carried out using a radiation measuring instrument attached to the parts of the body specified in Item 3 of the following paragraph shall be made with the unit of 70 μ m dose equivalent.
3. The dose due to external exposure provided for in Paragraph 1 shall be measured by attaching a radiation measuring instrument to the parts of the body designated in the following items. The dose, however, may be calculated based on the dose equivalent rate measured by a radiation measuring instrument when dose measurement using a radiation measuring instrument is extremely difficult, and the dose may be determined by calculation when the application of the alternative method is also extremely difficult.
 - (1) The chest for male workers and female workers who were diagnosed with no possibility of pregnancy, and the abdominal area for other female workers.
 - (2) The part most likely to be exposed to radiation among the head, neck, chest, upper arm, abdominal area and thigh (excluding cases where the parts most likely to be exposed to radiation for male workers and female workers who were diagnosed with no possibility of pregnancy are the chest and upper arm, and cases where the parts most likely to be exposed to radiation for other female workers are the abdominal area and the thigh).
 - (3) The part most likely to be exposed to radiation (excluding the case of neutron-rays), if such part is other than the head, neck, chest, upper arm, abdominal area and thigh.
4. The dose due to internal exposure under the provisions of Paragraph 1 shall be measured at least quarterly for workers who enter sections of a controlled area where there is a possibility of taking in radioactive materials either by inhalation or ingestion (at least monthly for female workers whose effective dose exposure may exceed 1.7 mSv in any single month (except for female workers who were diagnosed with no possibility of pregnancy) and female workers during pregnancy). However, in cases where a radiation worker mistakenly inhales or ingests radioactive materials, the measurement shall be conducted immediately after such ingestion or inhalation.
5. In measuring the dose due to internal exposure under the provisions of Paragraph 1, the measured value shall be

determined using the method provided by the Minister of Health, Labour and Welfare.

6. Radiation workers, emergency workers and workers who enter the controlled area temporarily shall wear radiation measuring instruments in the controlled area, with the exception of cases coming under the proviso to Paragraph 3.

(Confirmation, Recording, etc. of Dose Measurement Results)

Article 9.

Employers shall confirm the results of the measurement of the dose due to external exposure under the provisions of Paragraph 1 of the preceding article daily for workers who are likely to be exposed to radiation exceeding 1 mSv per day in the unit of 1 cm dose equivalent.

2. Employers shall calculate and record the dose for radiation workers listed in each of the following items without delay by using the methods provided by the Minister of Health, Labour and Welfare on the basis of the measurement and/or calculation results under the provisions of Paragraphs 3 or 5 of the preceding article, and keep such records for 30 years. This provision shall not apply in the event that an employer turns over such records to an organization designated by the Minister of Health, Labour and Welfare after keeping them for a period of five years.
 - (1) Quarterly, annual and five-year totals of the effective dose for male workers and female workers who were diagnosed with no possibility of pregnancy (quarterly and annual totals of the effective dose for workers whose effective dose did not exceed 20m Sv/year in the past five years).
 - (2) Monthly, quarterly and annual totals of the effective dose for female workers (except female workers who were diagnosed with no possibility of pregnancy) (quarterly and annual totals of the effective dose for workers whose effective dose is unlikely to exceed 1.7 mSv per month).
 - (3) Quarterly and annual totals of the tissue dose equivalents by human tissue.
 - (4) Monthly and the during-pregnancy totals of the effective dose due to internal exposure and the equivalent dose exposure to the abdomen surface of female workers during pregnancy.
3. Employers shall, without delay, inform each radiation worker of the dose specified in each item of the preceding paragraph based on the records under the provisions of the preceding paragraph.

(Containers)

Article 37.

Employers shall use containers when storing or keeping radioactive materials, or when carrying, temporarily storing before disposal or conducting landfill operations of radioactive materials or contaminated objects; provided, that this does not apply to a case in which it is extremely difficult to put these materials in containers, and effective measures are taken to shield the leakage of radiation to the outside or to prevent spread of contamination, or these materials are handled in the work rooms for handling radioactive materials .

2. (Omitted)
3. The employer shall put notices on the containers as described in Paragraph 1, which state that the containers contain radioactive materials or contaminated objects therein.
4. The employer shall indicate the items, as given below, on the containers which store, keep or carry the radiation materials, or store temporarily the said materials to dispose of the said materials.
 - (1) Types of radioactive materials and their classification as gas, liquid or solid.
 - (2) Types of radioisotopes contained in the radioactive materials and quantities of the radioisotopes

(Respiratory Protective Equipment)

Article 38.

Employers shall, if their workers are engaged in works in the area designated in the provisions of Article 28, emergency works, or other works in which the workers may inhale air contaminated to the level exceeding that designated by the Minister of Health, Labour and Welfare under Paragraph 3 of Article 3, provide them with effective personal respiratory protective equipment depending on the level of contamination, such as dust masks, gas masks, hose masks, oxygen breathing apparatuses, and make them use such equipment for the works.

2. When implementing the works as provided for by the preceding paragraph, workers shall use the protective equipment described in the same paragraph.

(Protective Equipment)

Article 39.

Employers shall, if their workers are engaged in works in which the workers may be contaminated to the level exceeding

one tenth of the limit designated in the Attached Table 3, provide them with effective protective clothes, gloves and shoes, and make them use such items for the works.

2. When implementing the works as provided for by the preceding paragraph, workers shall use the protective equipment described in the same paragraph.

(Prohibition of Smoking, etc.)

Article 41-2.

Employers shall prohibit their workers from smoking, eating, or drinking in the work rooms for handling radioactive materials and any workplaces where they are likely to inhale or ingest radioactive materials and shall post notices at easily visible places in such workplaces.

2. Workers shall not smoke, eat, or drink at the workplaces set forth in the preceding paragraph.

(Work Rules at Nuclear Reactor Facilities)

Article 41-12.

In carrying out work involving the handling of nuclear fuel materials, spent fuel materials, or anything contaminated by such materials within a controlled area of nuclear reactor facilities (such as those prescribed in Item 5, Paragraph 2 of Article 23 of the Law Concerning Regulations on Nuclear Raw Materials, Nuclear Fuel Materials and Nuclear Reactors; which are the same as in Paragraph 1 of Article 52-7), the employer shall formulate regulations necessary to protect workers from hazards due to radiation for such work with respect to the following matters, and shall carry out such work according to such regulations.

- (1) Operational methods and procedures.
 - (2) Measures concerning the monitoring of dose equivalent rates due to external radiation and the concentration of radioactive materials in the air.
 - (3) Measures concerning inspections with respect to the contamination of surface areas of the ceilings, floors, walls, facilities, etc., and the removal of such contamination.
 - (4) Emergency measures at the time any abnormal event occurs.
 - (5) In addition to each item above, the measures necessary to protect workers from radiation hazards.
2. (Omitted)

(Medical Examinations)

Article 56.

Employers shall provide their workers who are regularly engaged in radiation works and enter the controlled areas with medical examinations by medical doctors regarding the following items, at the time of employment and reallocation, and periodically once every six months thereafter.

- (1) Investigation and evaluation of radiation exposure history (for workers with an exposure history, confirm the location of works, nature of works, duration, existence of radiation damage, existence of subjective symptoms and other details concerning radiation exposure)
- (2) Examination of leukocyte count and percentage
- (3) Examination of red blood cell count and hemoglobin contents or hematocrit values
- (4) Examination of eyes for cataract
- (5) Examination of skin

(Paragraph 2 and the rest omitted)

(Recording of Results of Medical Examinations)

Article 57.

The employer shall prepare the Ionizing Radiation Medical Examination Cards (Form No.1-2) based on the results of the medical examinations provided for by Paragraph 1 of the preceding article (including medical examinations received by workers under the proviso of Paragraph 5 of Article 66 of the Law and called the "ionizing radiation medical examination" in the following article and Article 59) and keep the cards for a period of 30 years. However, this shall not apply when such records are transferred to an organization designated by the Minister of Health, Labour and Welfare, after being kept for five years.

(Reporting the Results of Medical Examinations)

Article 58.

When the employer has medical doctors carry out medical examinations, as provided for by Paragraph 1 of Article 56, (restricted only to those done periodically), he shall submit without delay the Report on the Results of the Medical Examinations on Ionizing Radiation (Form No. 2) to the Head of the relevant Labour Standards Inspection Office.

Ordinance on Industrial Safety and Health (Extracted)

(Prevention of Workers Being Hit)

Article 158.

1. The employer shall, when carrying out the work using a vehicle type construction machine, not allow a worker to enter a place, which is liable to cause dangers to workers due to being hit by the vehicle type construction machine during operation. However, this shall not apply to when arranging a guide and having the said person guide the said machine, etc.
2. The operator of the vehicle type construction machine set forth in the preceding paragraph shall follow the instruction given by guide set forth in the proviso of the same paragraph.

(Periodical Self-inspections)

Article 167.

1. The employer shall, as regards a vehicle type construction machine, carry out self-inspections for the following matters periodically once every period within a year. However, this shall not apply to the non-use period of a vehicle type construction machine, which is not used for a period exceeding one year:
 - (1) Abnormalities in compression pressure, valve clearance and other parts of a prime mover.
 - (2) Abnormalities in a clutch, a transmission, a propeller shaft, a differential and other power transmission devices.
 - (3) Abnormalities in a drive wheel, an idling wheel, a vertical trunk roller, a belt, a tire, a wheel bearing and other traveling devices.
 - (4) Abnormalities in rotation angle of left and right steering wheels, a knuckle, a rod, an arm and other controlling devices.
 - (5) Abnormalities in braking capability, a brake drum, a brake shoe and other brakes.
 - (6) Abnormalities in a blade, a boom, link-mechanism, a bucket, a wire rope and other working devices.
 - (7) Abnormalities in a hydraulic pump, a hydraulic motor, a cylinder, a safety valve and other parts of a hydraulic system.
 - (8) Abnormalities in voltage, amperage and other parts of electrical system.
 - (9) Abnormalities in a body, an operating device, a head guard, a back stopper, a raising and lowering device, a locking device, a warning device, a direction indicator, a lightning device and a meter.
2. The employer shall, as regards the vehicle type construction machine set forth in the proviso of the preceding paragraph, carry out self-inspection for the matters listed in each item of the same paragraph before resuming the operation.

(Working Floor)

Article 563.

1. The employer shall provide a work place on scaffolding (excluding single-row scaffolding: the same shall apply in Item (3)) having a height of 2 m or more with a working floor as prescribed in the followings:

(The rest omitted)