

ENFORCEMENT REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT

Ministry of Labor Decree No.17, October 29,1982

Amended by	Ministry of Labor Decree No. 36	Nov. 11, 1986
	Ministry of Labor Decree No. 40	June 15, 1987
	Ministry of Labor Decree No. 49	Jan. 12, 1989
	Ministry of Labor Decree No. 61	July 23, 1990
	Ministry of Labor Decree No. 62	July 23, 1990
	Ministry of Labor Decree No. 63	Aug. 11, 1990
	Ministry of Labor Decree No. 74	Mar. 21, 1992
	Ministry of Labor Decree No. 81	Jan. 18, 1993
Ministry of Construction Decree No. 550		Mar. 24, 1994
	Ministry of Labor Decree No. 89	Mar. 29, 1994
	Ministry of Labor Decree No. 97	Apr. 29, 1995
	Ministry of Labor Decree No. 103	Nov. 23, 1995
	Ministry of Labor Decree No. 119	Oct. 16, 1997
	Ministry of Labor Decree No. 156	Aug. 28, 1999
	Ministry of Labor Decree No. 168	Sep. 28, 2000
	Ministry of Labor Decree No. 194	July 7, 2003
	Ministry of Labor Decree No. 217	Dec. 31, 2004
	Ministry of Labor Decree No. 228	June 30, 2005
	Ministry of Labor Decree No. 231	Aug. 1, 2005
	Ministry of Labor Decree No. 240	Oct. 7, 2005
	Ministry of Labor Decree No. 255	July 19, 2006
	Ministry of Labor Decree No. 259	Sep. 25, 2006
	Ministry of Labor Decree No. 265	Jan. 12, 2007
	Ministry of Labor Decree No. 289	Dec. 31, 2007
	Ministry of Labor Decree No. 298	Mar. 3, 2008
	Ministry of Labor Decree No. 303	June 27, 2008
	Ministry of Labor Decree No. 308	Sep. 18, 2008
	Ministry of Labor Decree No. 330	Aug. 7, 2009
	Ministry of Labor Decree No. 345	June 24, 2010
		July 12, 2010
Ministry of Employment and Labor Decree No. 18		Mar. 3, 2011
Ministry of Employment and Labor Decree No. 22		Mar. 16, 2011
Ministry of Employment and Labor Decree No. 30		July 6, 2011
Ministry of Employment and Labor Decree No. 47		Jan. 26, 2012

PART I GENERAL PROVISIONS <Amended Aug. 7, 2009>

CHAPTER I COMMON PROVISIONS <Amended Aug. 7, 2009>

Article 1 (Purpose)

The purpose of these Regulations is to prescribe matters delegated by the Occupational Safety and Health Act and the Enforcement Decree of the same Act as well as matters necessary for the enforcement thereof.

<Wholly amended Aug. 7, 2009>

Article 2 (Definitions)

(1) The phrase “accidents ... which are prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in subparagraph 7 of Article 2 of the Occupational Safety and Health Act (hereinafter referred to as the “Act”) shall mean any of the following accidents: <Amended July 12, 2010>

1. any accident resulting in one or more deaths;
2. any accident resulting in two or more persons being injured and requiring medical care for three months or more; or
3. any accident resulting in ten or more persons being injured or suffering occupational disease.

(2) The phrase “safety and health sign” shall mean any sign that contains pictorial, symbolic or textual indication of a warning against hazardous areas or substances, instructions or information for emergency responses, or any other matters designed to enhance the safety awareness of workers and is installed or affixed to ensure the safety and health of workers in, at or to a particular place, facility or object in a workplace where any errors in the act or judgment of a worker is likely to cause industrial accidents.

(3) Unless otherwise expressly provided in these Regulations, the definitions in the Regulations on Occupational Safety and Health Standards (hereinafter referred to as the “Safety and Health Regulations”) shall be applicable to any other terms used in these Regulations. <Amended July 6, 2011>

<Wholly amended Aug. 7, 2009>

Article 3 Deleted. <July 7, 2003>

Article 3-2 (Request for Cooperation)

(1) Pursuant to Article 9 (1) of the Act, the Minister of Employment and Labor may request the cooperation of the head of the relevant administrative agency or the head of a public institution under Article 4 of the Act on the Management of

Public Institutions for any of the following matters: [<Amended July 12, 2010>](#)

1. the implementation of a safety culture campaign intended to foster safety and health awareness;
2. the support for promotional activities engaged in to prevent industrial accidents;
3. the revamping of overlapping regulation related to safety and health;
4. the lending of funds and the granting of other financing and tax benefits for any establishment where safety and health-related facilities are improved;
5. the conducting of safety and health inspections to be jointly conducted by relevant organizations on an establishment;
6. the reduction of the monetary amount of completed projects in reference to the industrial accident rate of a construction contractor as set forth in subparagraph 1 of Table 1 for the purpose of evaluating the bidding capacity of the contractor under Article 23 of the Framework Act on the Construction Industry;
7. the awarding of bonus or penalty points in reference to the industrial accident rate and the number of violations of the obligation to report industrial accidents of a construction contractor as set forth in subparagraph 1 of Table 1 for the purpose of pre-qualification of potential bidders under Article 13 of the Enforcement Decree of the Act on Contracts to Which the State is a Party (where the criteria and method for calculating the industrial accident rate and the number of violations of the obligation to report industrial accidents of the construction contractor shall be in accordance with Table 1);
8. materials related to industrial accidents or physical examinations;
9. matters concerning the restrictions on commendations and awards for any business where the industrial accident is relatively high in the applicable business sector (including its board members) for the purpose of selecting businesses to receive government commendations and awards; or
10. any other such matters as deemed necessary for the effective implementation of industrial accident prevention plans.

(2) The Minister of Employment and Labor shall notify the applicable construction contractor of the industrial accident rate calculated in accordance with Table 1 and how the rate is calculated. In such case, any construction contractor disagreeing with the industrial accident rate and the details of calculation may raise an objection to the Minister of Employment and Labor

within ten days of such notification. <Amended July 12, 2010>
<Wholly amended Aug. 7, 2009>

Article 3-3 (Manner of Public Announcement)

The public announcement under Article 9-2 (2) of the Act shall be made in the official gazette, on the Internet, or in a newspaper in daily circulation registered as being in nationwide distribution in accordance with Article 12 (1) of the Act on the Freedom of Newspapers, etc. and Guarantee of Their Functions.

<Wholly amended Aug. 7, 2009>

Article 4 (Reporting of Industrial Accidents)

(1) In the event of an industrial accident resulting in any deaths or any person sustaining any injury or contracting any disease that requires medical care for four days or more, the employer shall prepare an industrial accident investigation sheet in the form as set forth in Table 1 and submit such table to the head of the competent regional or district employment and labor office (hereinafter referred to as the “head of the local labor authority”) in accordance with Article 10 (2) of the Act within one month of the occurrence of the applicable industrial accident, except where an application for medical care benefits under Article 41 of the Industrial Accident Compensation Insurance Act or survivors’ benefits under Article 62 of the same Act has been filed with the Korea Labor Welfare Corporation within one month of the occurrence of such industrial accident. <Amended July 12, 2010>

(2) If the employer becomes aware of the occurrence of any accident as set forth in subparagraphs 1 through 3 of Article 2 (1) (hereinafter referred to as a “serious accident”), the employer shall promptly notify the head of the competent local labor authority of matters as set forth in the following subparagraphs by telephone or facsimile or using any other appropriate means in accordance with Article 10 (2) of the Act; provided, however, that in the event of an act of God or any other unavoidable circumstance, the notification shall promptly be provided when the such circumstance ceases to exist: <Amended July 12, 2010>

1. an overview of the occurrence and damage assessment;
2. measures and a projected outcome; and
3. any other important matters.

(3) The employer shall have the industrial accident investigation sheet acknowledged by the representative of workers and attach to the sheet any disagreements, if any, of the representative on statements therein; provided, however, that the acknowledgement by the representative of workers may be omitted in the case of construction industry.

(4) The Minister of Employment and Labor shall prescribe matters necessary for the reporting of industrial accidents under the provisions of paragraphs (1) through (3). <Amended July 12, 2010>

(5) Upon receipt of any applications for medical care benefits under the proviso of paragraph (1), the Korea Labor Welfare Corporation shall comply with the request, if any, of the head of the local labor authority or the Korea Occupational Safety and Health Agency (hereinafter referred to as the “Agency”) for copies of the applications, computer data entries related to medical care activities, and/or any other materials required to conduct industrial accident prevention activities.

<Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 4-2 (Industrial Accident Records etc.)

In the event of any industrial accident, the employer shall prepare and file the record of matters as set forth in the following subparagraphs in accordance with Article 10 (1) of the Act, except where copies of industrial accident investigation sheets under Article 4 (1) or copies of applications for medical care benefits under Article 4 (5) with a plan to prevent the recurrence of the accident as attached thereto have been filed:

1. an overview of the business establishment and the personal identification information on the workers;
2. the time, date and place of the industrial accident;
3. the cause and development of the accident; and
4. a plan to prevent the recurrence of the accident.

<Wholly amended Aug. 7, 2009>

Article 5 (Requests of Representative of Workers)

The phrase “other matters concerning safety and health as prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 11 (2) 6 of the Act shall refer to: <Amended July 12, 2010>

1. the findings of the safety or health survey under Article 49 of the Act; and
2. the details of the development and implementation of a safety and health improvement plan under Article 50 of the Act (limited to any establishment ordered to develop and implement the safety and health improvement plan).

<Wholly amended Aug. 7, 2009>

CHAPTER II SAFETY AND HEALTH SIGNS

Article 6 Types, Shapes, Uses etc. of Safety and Health Signs)

- (1) The types and shapes of safety and health signs under Article 12 of the Act shall be as set forth in Table 1-2, and their uses and places of use in Table 2.
- (2) Where necessary to elucidate what a safety and health sign indicates, textual indications may be added around the safety and health sign, where letters shall be printed in a black, Hangeul sans-serif typeface over a white background.
- (3) The provisions of any other act or any ordinance thereof for any such matters concerning safety and health signs as not provided for in the Act or any ordinance thereof shall be applicable to such matters.

<Wholly amended Aug. 7, 2009>

Article 7 (Installation etc. of Safety and Health Signs)

- (1) Where the employer installs or affixes a safety and health sign in accordance with Article 12 of the Act, such sign shall be installed or affixed in, at or to a place, facility or object readily recognizable by the worker as classified in Table 2.
- (2) Where the employer installs or affixes a safety and health sign, such sign shall be firmly installed or affixed so that the sign is not swayed or readily damaged.
- (3) If the nature of a safety and health sign renders it difficult to install or affix it, the sign may be painted directly on the applicable object.

<Wholly amended Aug. 7, 2009>

Article 8 (Colors etc. of Safety and Health Signs)

The colors, color notations and uses used for safety and health signs shall be as set forth in Table 3, while the colors for safety and health signs by type shall be as set forth in Table 2.

<Wholly amended Aug. 7, 2009>

Article 9 (Fabrication of Safety and Health Signs)

(1) Each type of safety and health signs shall be fabricated according to the template models as set forth in Table 4 as classified in Table 2.

(2) Safety and health signs shall be fabricated in such sizes that allow the worker to quickly and readily recognize what they indicate.

(3) The size of a picture or symbol in a safety and health sign shall be proportional to the size of such sign, but in any case no less than thirty percent of the entire sign.

(4) The safety and health signs required during night hours shall be fabricated using luminous substances or otherwise in a manner readily recognizable.

<Wholly amended Aug. 7, 2009>

Article 10 (Materials of Safety and Health Signs)

Safety and health signs shall be fabricated of materials not readily damaged or deteriorated, and painted with pigments that will not faded, as mixed with binders.

<Wholly amended Aug. 7, 2009>

PART II SAFETY AND HEALTH MANAGEMENT SYSTEM

Article 11 (Duties of Safety and Health Managers)

The phrase “such matters ... as prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 13 (1) 9 of the Act shall refer to such matters concerning the prevention of hazards to workers or their health impairment. <Amended July 12, 2010; July 6, 2011>

<Wholly amended Aug. 7, 2009>

Article 12 (Operations Requiring Safety and Health Managers)

The phrase “businesses ... as prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 9 (1) of the Decree shall refer to any of the following: <Amended July 12, 2010>

1. any construction business that undertakes any project amounting to 2 billion won or more in total (including the market value of any materials provided by the project owner if the project is a contracted project); or

2. any such business employing no less than fifty workers employed on an ongoing basis but less than one hundred ongoing workers.

<Wholly amended Aug. 7, 2009>

Article 13 *Deleted.* <Aug. 7, 2009>

Article 14 (Appointment etc. of Managers et al.)

- (1) The employer shall promptly appoint or designate any safety and health managers under Article 13 (1) of the Act, safety managers under Article 15 (1) of the Act, health managers under Article 16 (1) of the Act, and/or general safety and health managers under Article 18 (1) of the Act (hereinafter referred to as “managers et al.”) if any event requires such appointment or designation.
- (2) If the employer appoints or re-appoints any managers et al. (other than safety and health managers and general safety and health managers) pursuant to paragraph (1) or engages a safety management service provider or health management service provider to provide safety or health management services or replaces the provider following such engagement pursuant to Article 15 (4) or 16 (3) of the Act, such employer shall submit to the head of the competent local labor authority a Report of the Appointment etc. of Safety Managers, Health Managers and/or Occupational Physicians in the form of Schedule 1-2 (1) or a Report of the Appointment etc. of Safety Managers (Construction Sector) in the form of Schedule 1-2 (2). <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 15 (Order to Add or Replace Safety Managers et al.)

- (1) In any of the following events, the head of a local labor authority may order the employer to have in place more safety and/or health managers (hereinafter referred to as “managers”) than would otherwise be required or to replace a particular manager pursuant to Articles 15 (3) and 16 (3) of the Act: <Amended July 12, 2010>
 1. where the annual accident rate of the applicable workplace is twice as high as the average rate in the same business sector or higher;
 2. where three or more serious accidents have occurred in any one calendar year; or

3. where disease or any other event has rendered a manager unable to perform his or her duties for three months or more.

(2) Where an order is given to have in place more safety and/or health managers than would otherwise be required or to replace a particular manager in accordance with paragraph (1), the employer and the applicable manager shall be allowed to present their opinions or afforded an opportunity to submit written explanations, except where such persons have neglected to present their opinions or submit explanations without just cause.

(3) The order to add more managers or replace a particular manager issued under paragraph (1) shall be in the form of Schedule 3.

<Wholly amended Aug. 7, 2009>

Article 15-2 (Appointment of Safety Managers for Contractor' s Operation)

Any employer who is a contractor (such contractors shall include subcontractors; hereinafter the same shall apply) required to have in place safety managers may elect not to appoint safety managers pursuant to Article 12 (5) of the Decree if the host employer meets the following requirements:

1. where the host employer has in place its own safety managers that are required for the project; or
2. where the contractor has additionally appointed safety managers applicable for the monetary amount of the project or the number of total ongoing workers for each line of industry of the employer requiring safety managers (the number of ongoing workers or the amount of the project in the case of the construction sector).

<Wholly amended Aug. 7, 2009>

Article 15-3 (Standards for Services Provided by Safety Management Service Provider)

(1) If a safety management service provider under Article 15 (4) of the Act provides safety management services for an employer pursuant to Article 15 (5) of the Act, the state of the safety management services for the workplace shall be periodically inspected as prescribed by the Minister of Employment and Labor.

<Amended July 12, 2010>

(2) Every month, the safety management service provider shall prepare a report on the state of safety management services as prescribed by the Minister of

Employment and Labor and submit such report to the employer no later than the tenth day of the immediately following month. If the inspection under paragraph (1) has led to the discovery of any violations of laws, such service provider shall immediately notify the employer of such violations and specific remedial measures. [<Amended July 12, 2010>](#)

(3) The safety management service provider shall prepare and maintain a workplace management card recording, inter alia, the details of safety management services, findings identified by the inspection, and measures taken as prescribed by the Minister of Employment and Labor. If the service provider ceases to perform safety management services for the applicable workplace, such service provider shall deliver the workplace management card to the employer of the applicable workplace to ensure that matters concerning safety may continue to be managed. [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 15-4 (Geographic Coverage of Safety Management Service Provider)

The geographic coverage in which a safety management service provider may provide services pursuant to Article 15 (5) of the Act shall be the jurisdictional area of the regional employment and labor office that has designated such service provider (including the jurisdictional areas of the local labor authority reporting to such regional employment and labor office). [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 15-5 (Safety Management Service Contract)

If a safety management service provider intends to be engaged by an employer to provide safety management services, such service provider shall enter into a safety management service contract in the form of Schedule 3-2.

[<Wholly amended Aug. 7, 2009>](#)

Article 15-6 Deleted. [<Oct. 7, 2005>](#)

Article 16 (Provision of Facilities and Equipment to Health Manager)

The employer shall provide a health manager with such facilities and equipment as may be necessary to allow the manager to perform his or her duties in accordance with Article 17 (2) of the Decree. If such health manager is a

physician or nurse, the following facilities and equipment shall be provided:

1. an infirmary, which shall be at a location well lit and ventilated that is readily accessible by workers, of a size adequate for the performance of the manager' s duties, and equipped with counseling offices, treatment rooms and sanatoriums; and
2. water and sewage installations, beds, heating and cooling, direct outside phone lines, first aid kits etc.

<Wholly amended Aug. 7, 2009>

Article 17 (Standards for Staffing, Facilities and Equipment of Safety Management Service Providers)

The standards for the staffing, facilities and equipment of a safety management service provider under Article 15–2 of the Decree shall be as set forth in Table 5.

<Wholly amended Aug. 7, 2009>

Article 18 (Application etc. for Designation of Safety Management Service Provider)

(1) Any person intending to be designated as a safety management service provider pursuant to Article 15–3 (1) of the Decree shall file (either physically or by electronic means) with the head of the competent regional employment and labor office exercising jurisdiction over the workplace where its services are to be provided an application for designation of a safety management service provider in the form of Schedule 4 as well as the following documents as attached thereto: <Amended July 12, 2010; Mar. 3, 2011; Jan. 26, 2012>

1. its Articles of Incorporation (or a registration under Article 136–8 in the case of an occupational safety consultant);
2. licenses (other than national technical qualifications under Article 13 of the National Technical Qualifications Act), career certificates, certificates of employment and other documents evidencing the qualifications and employment of the persons meeting the staffing standards as set forth in Table 5;
3. photocopies of building lease agreements or any other documents and facility and equipment specifications evidencing that an office is maintained; and
4. a business plan for safety management services for the first one year.

(2) Upon receiving an application under paragraph (1), the head of the regional employment and labor office shall verify the certificate of corporate register entries and national technical qualifications under Article 13 of the National Technical Qualifications Act (hereinafter referred to as “national technical qualifications”) by accessing administrative information shared under Article 36 (1) of the Electronic Government Act, and require the applicant to attach photocopies of national technical qualifications to the application unless the applicant consents to such verification. [<Amended Mar. 3, 2011>](#)

(3) Upon receiving an application for designation of a safety management service provider under paragraph (1), the head of the regional employment and labor office shall review the feasibility of the business plan for the first year to determine whether to initiate the designation and then either reject the application or issue to the applicant a certificate of designation in the form of Schedule 5 within twenty one days of such receipt. [<Amended July 12, 2010>](#)

(4) Any person who is issued a certificate of designation under paragraph (3) may apply for reissuance if the certificate is lost or defaced.

(5) If a safety management service provider intends to make modifications with respect to its designation under Article 15-3 (2) of the Decree, such service provider shall file with the head of the competent regional employment and labor office an application for modification in the form of Schedule 6 as well as its certificate of designation and documents evidencing such modifications. In such case, paragraph (3) shall be applicable *mutatis mutandis* with respect to the processing of the application for modification. [<Amended July 12, 2010>](#)

(6) A safety management service provider shall immediately return its certificate of designation under paragraph (3) to the head of the regional employment and labor office if the service provider discontinues the applicable services or its designation is revoked pursuant to Article 15-2 (1) of the Act. [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 18-2 (Designation of Safety Management Service Providers Spanning Two or More Jurisdictions)

If a safety management service provider intends to provide safety management services in the jurisdictions of two or more heads of regional employment and labor offices, such service provider shall file applications for designation with

each of such heads, where the applicable heads of the competent regional employment and labor offices shall consult with one another to determine whether to approve the designation. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 18-3 (Notice etc. for Payment of Penalty Charges)

The notice and receipt for penalty charges under paragraphs (1) and (3) of Articles 15-7 of the Decree shall be in the form of Schedule 7.

<Article added Sep. 25, 2006>

Article 19 (Line of Industry or Harmful Agent-Specific Health Management Service Providers)

(1) The operation for which line of industry specific health management service providers may be engaged to provide health management services pursuant to Article 19 (3) of the Decree shall be mining.

(2) The operations for which line of harmful agent-specific health management service providers may be engaged to provide health management services pursuant to Article 19 (3) of the Decree shall be as follows:

1. any operations handling lead;
2. any operations handling mercury;
3. any operations handling chrome;
4. any operations handling asbestos;
5. any operations handling any substances for which manufacturing and/or use permits are required under Article 38 of the Act; and
6. any operations involving, *inter alia*, monotonous and repetitive work, work using visual display terminals, and handling of heavy objects, which may cause musculoskeletal disorders.

<Wholly amended Aug. 7, 2009>

Article 19-2 (Standards for Services Provided by Health Management Service Providers, Areas etc.)

The provisions of Articles 15-3 through 15-5 shall be applicable *mutatis mutandis* to, *inter alia*, the standards for services provided by health management service providers, the areas in which such services are to be provided, and service contracts.

<Wholly amended Aug. 7, 2009>

Article 20 (Standards for Staffing, Facilities and Equipment of Health Management Service Providers)

The standards for the staffing, facilities and equipment of a health management service provider under Article 19-2 of the Decree shall be as set forth in Table 6.

<Wholly amended Aug. 7, 2009>

Article 21 (Application etc. for Designation of Health Management Service Provider)

(1) Any person intending to be designated as a health management service provider pursuant to Article 19-3 of the Decree shall file (either physically or by electronic means) with the Minister of Employment and Labor (in the case of a line of industry- or harmful agent-specific health management service provider only) or the head of the competent regional employment and labor office exercising jurisdiction over the workplace where its services are to be provided (in the case of an area-specific health management service provider only) an application for designation of a health management service provider in the form of Schedule 4 as well as the following documents as attached thereto: <Amended July 12, 2010; Mar. 3, 2011; Jan. 26, 2012>

1. its Articles of Incorporation (or a registration under Article 136-8 in the case of an occupational hygiene consultant);
2. any document that may be submitted in lieu of the Articles of Incorporation (only where the applicant is not a juristic person);
3. any document that may be submitted in lieu of a certificate of corporate register entries (only where the applicant is not a juristic person);
4. licenses (other than national technical qualifications), career certificates, certificates of employment and other documents evidencing the qualifications and employment of the persons meeting the staffing standards as set forth in Table 6;
5. photocopies of building lease agreements or any other documents and facility and equipment specifications evidencing that an office is maintained; and
6. a business plan for health management services for the first one year.

(2) Upon receiving an application under paragraph (1), the Minister of

Employment and Labor or the head of the regional employment and labor office shall verify the certificate of corporate register entries (only where the applicant is a juristic person) and national technical qualifications by accessing administrative information shared under Article 36 (1) of the Electronic Government Act, and require the applicant to attach photocopies of national technical qualifications to the application unless the applicant consents to such verification. <Amended Mar. 3, 2011>

(3) The provisions of Articles 18 (3) through 18 (6) and Article 18-2 shall be applicable *mutatis mutandis* to, *inter alia*, examinations conducted to designate health management service providers, the issuance and reissuance of certificates of designation, the modification of designation, the return of certificates of designation, and the designation of a health management service provider spanning two or more jurisdictions.

<Wholly amended Aug. 7, 2009>

Article 22 Deleted. <Nov. 23, 1995>

Article 23 (Documents to Be Made Available)

A safety/health management service provider shall make available and retain the following documents for three years:

1. documents on safety/health management services; and
2. other documents concerning the duties performed by the safety/health management service provider.

<Wholly amended Aug. 7, 2009>

Article 24 (Direction, Supervision etc. of Health Management Service Providers)

(1) The Minister of Employment and Labor or the head of the regional employment and labor office shall direct and supervise safety and/or health management service providers. <Amended July 12, 2010>

(2) The Minister of Employment and Labor shall prescribe the standards for the direction and supervision and any other necessary matters under paragraph (1).

<Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 25 (Workplaces Requiring Establishment of Occupational Safety and Health Committee)

The phrase “workplaces as prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 25 (2) of the Decree shall refer to any workplaces engaged in any of the following operations: [<Amended July 12, 2010>](#)

1. quarrying of earth, sand and clay;
2. manufacturing of wood and of products of wood and cork, except furniture
3. manufacturing of chemicals and chemical products (except manufacturing of pharmaceuticals, detergents, cosmetics, polishes, and chemical fiber);
4. manufacturing of other non-metallic mineral products;
5. manufacturing of basic metals;
6. manufacturing of fabricated metal products, except machinery and furniture
7. manufacturing of motor vehicles and trailers
8. manufacturing of machinery and equipment not elsewhere classified (except office machinery and equipment); manufacturing of domestic appliances; or manufacturing of other electrical equipment; or
9. manufacturing of other transport equipment (except manufacturing of military fighting vehicles);

[<Wholly amended Aug. 7, 2009>](#)

Article 25-2 (Nomination of Worker Members of Committee)

Where a worker representative designates worker members of the committee pursuant to Article 25-2 (1) 3 of the Decree, the worker representative shall make efforts to designate worker members in a manner that accounts for the ratio of workers who are union members to those who are not. [<Amended Jan. 26, 2012>](#)

[<Wholly amended Aug. 7, 2009>](#)

PART III SAFETY AND HEALTH MANAGEMENT REGULATIONS

Article 26 (Preparation etc. of Safety and Health Management Regulations)

(1) The operation requiring safety and health management regulations to be prepared under Article 20 (3) shall be any operation employing one hundred or more ongoing workers.

(2) The employer owning an operation as set forth in paragraph (1) shall prepare safety and health management regulations containing matters as set forth in Table 6–2 within thirty days of the occurrence of the event requiring such regulations. The same shall be applicable upon the occurrence of any event requiring such regulations to be modified.

(3) Where the employer prepares safety and health management regulations as set forth in paragraph (2), such regulations may incorporate provisions for safety management as set forth in other laws governing, *inter alia*, fire services, gas, power and transportation.

<Wholly amended Aug. 7, 2009>

PART IV MEASURES TO PREVENT HARMS AND HAZARDS <Amended Aug. 7, 2009>

CHAPTER I APPROVAL FOR HARMFUL OR HAZARDOUS CONTRACT WORK <Amended Aug. 7, 2009>

Article 27 Application for Approval for Contract Work

(1) Any person intending to obtain approval for contracting out harmful or hazardous work pursuant to Article 28 (1) of the Act, shall file with the head of the competent local labor authority an application for approval for contract work in the form of Schedule 8 and the following documents as attached thereto:
<Amended July 12, 2010>

1. a process flow diagram of the work to be contracted out (which shall contain, *inter alia*, matters concerning types and operational conditions of machinery and equipment; types and usage of harmful and/or hazardous substances; facts regarding the occurrence of harmful or hazardous factors; and the number of workers engaged in such work); and
2. a plan for contracting out the work (which shall include matters concerning, *inter alia*, the reason for contracting out the work; safety and health management for the contract work; and safety and health facilities for the contract work).

(2) Upon receiving an application for approval for contract work as set forth in paragraph (1), the head of the local labor authority shall either reject the application or issue an approval in the form of Schedule 9 to the applicant within

ten days of such receipt. <Amended July 12, 2010>

(3) If it is necessary to verify whether a workplace that has applied for approval for contract work under paragraph (1) has been meeting the standards for approval for contract work under Article 28, the head of the local labor authority may cause the Agency to verify technical details. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 28 (Standards for Approval for Contract Work)

(1) The standards for the safety and health measures to be observed in contracting out harmful or hazardous work as set forth in Article 28 (2) of the Act shall be as follows: <Amended July 12, 2010; Mar. 3, 2011; July 6, 2011>

1. for any work under Articles 26 (1) 1 and 26 (1) 2 of the Decree: such standards as set forth in the provisions of Articles 5, 7, 8, 33, 72 through 81, 83 through 85, 422, 429 through 435, 439, 442 through 444, 448, 450, and 451 of the Safety and Health Regulations;
2. for any work under Article 26 (1) 3 of the Decree: such standards as set forth in the provisions of Articles 5, 7, 8, 33, 72 through 81, 83 through 85, 453 through 455, 459, 461, 463 through 465, 468 through 474, 477 through 481, 483, and 484 of the Safety and Health Regulations; or
3. for any work under Article 26 (1) 4 of the Decree: such standards as prescribed by the Minister of Employment and Labor.

(2) The Minister of Employment and Labor shall not issue approval unless the content of the application for approval under Article 27 (1) and the verification completed by the Agency under paragraph (3) of the same Article establish that the standards as set forth in each subparagraph of paragraph (1) are met.

<Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

CHAPTER II SAFETY AND HEALTH FOR CONTRACTOR' S OPERATION <Amended Aug. 7, 2009>

Article 29 (Organization and Operation of Consultative Body)

(1) A consultative body as set forth in Article 29 (2) 1 of the Act shall consist of the host employer and all of its contractor employers. <Amended Jan. 26, 2012>

(2) The consultative body as set forth in paragraph (1) shall consult on, *inter*

alia, the starting time of work, the methods of communication between workplaces, and the evacuation methods to be used in the event of a hazard that may cause accidents.

(3) The consultative body as set forth in paragraph (1) shall periodically hold meetings once or more per month meetings and record and retain minutes of the meetings.

<Wholly amended Aug. 7, 2009>

Article 30 (En Route Inspection etc. of Workplace)

(1) The host employer shall conduct one or more en route inspections in the workplace in accordance with Article 29 (2) 2 of the Act. <Amended Jan. 26, 2012>

(2) The contractor employer shall not refuse, interfere with or evade en route inspections conducted by the host employer under paragraph (1) and shall comply with the request for corrective action, if any, made by the host employer as a result of such inspections.

(3) The host employer shall provide the space and materials as may be necessary for the safety and health training of workers arranged by the contractor employer and otherwise take other necessary measures in accordance with Article 29 (2) 3 of the Act. <Amended Jan. 26, 2012>

(4) The phrase “a place which is designated by the Ordinance of the Ministry of Employment and Labor as an area at risk of industrial accidents” as set forth in Article 29 (3) of the Act shall refer to any of the following places: <Amended July 12, 2010; Mar. 3, 2011; July 6, 2011; Jan. 26, 2012>

1. any place where soil, sand, manmade structures etc. may collapse;
2. any place where machinery, apparatus etc. may topple over or collapse;
3. any place where it is necessary to install safety guardrails;
4. any place where scaffolds or concrete forms are installed or dismantled;
5. any place where construction elevators are operated;
6. any place where the ground is excavated or blasting work is performed;
7. any elevator hall or any place where the worker is exposed to fall hazards;
8. any place where any work that is prohibited to be contracted out under Article 26 (1) 3 of the Decree is performed;
9. any place where any of the following work that may cause fires and explosions:

- a. welding and/or oxygen cutting work within a ship;
- b. welding and/or oxygen cutting work on special chemical equipment under Article 273 of the Safety and Health Regulations; or
- c. welding and/or oxygen cutting work on any equipment and/or container where inflammable substances are handled or stored under subparagraph 4 of Article 225 of the Safety and Health Regulations;
- 10. any confined place under subparagraph 1 of Article 618 of the Safety and Health Regulations if and where work is performed;
- 11. any place where objects to which asbestos is added are crushed or dismantled;
- 12. any place where dangerous substances as set forth in Table 1 of the Safety and Health Regulations are manufactured or handled;
- 13. any special place where organic compounds are handled as set forth in Article 420 (7) of the Safety and Health Regulations;
- 14. any place near overhead power lines where electric shock hazards exist in the installation, dismantling, inspection and repair of installations;
- 15. any place where the hazards of objects falling or flying exist; or
- 16. any place where work involves the use of a press or shearer.

(5) Except where provided in these Regulations, the provisions of the Safety and Health Regulations shall be applicable to the measures required to be taken by the host employer under Article 29 (3) of the Act. <Amended July 12, 2010; July 6, 2011; Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

Article 30-2 (Joint Safety and Health Inspections on Contractor' s Operation)

(1) Where the host employer shall conduct a safety and health inspection under Article 29 (4) of the Act, a team of inspectors shall consist of the following persons: <Amended Jan. 26, 2012>

- 1. the host employer (or the head of the workplace if another workplace of the same operation is located in a different area);
- 2. the contractor employer (or the head of the workplace if another workplace of the same operation is located in a different area); and
- 3. one worker of each of the host employer and the contractor employer (limited to a worker performing the applicable process in the case of a worker of the contractor employer).

(2) The frequency of periodical safety and health inspections under Article 29 (4) of the Act shall be as follows: <Amended Mar. 3, 2011; Jan. 26, 2012>

1. twice or more per two-month period for any of the following operations:

- a. construction; or
- b. building of ships and boats; or

2. once or more per quarter for any of the following operations:

- a. earth, sand and stone mining;
- b. manufacturing (other than the building of ships and boats);
- c. publication of books, magazines and other printed materials;
- d. publication of music and other audio recordings; or
- e. recycling of metal and nonmetal materials.

<Wholly amended Aug. 7, 2009>

Article 30-3 (Installation etc. of Sanitation Facilities and Other Cooperation)

The phrase “the standards for sanitation facilities as prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 29 (8) of the Act shall refer to the standards as set forth in the Safety and Health Regulations for the following facilities:

- 1. resting facilities;
- 2. face wash and bathing facilities;
- 3. laundry facilities;
- 4. change room facilities; and
- 5. sleeping facilities.

<Article added Jan. 26, 2012>

Article 31 (Matters to Be Deliberated by Consultative Body)

The phrase “the matters as prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 29-2 (6) of the Act shall refer to the following: <Amended July 12, 2010>

- 1. industrial accident prevention methods as well as evacuation methods to be used in the event of an industrial accident;
- 2. the starting time of work and the methods of communication; and
- 3. any other matters related to the prevention of industrial accidents.

<Wholly amended Aug. 7, 2009>

Article 32 (Use of Funds for Occupational Safety and Health Management)

(1) If a contractor or any person conducting its own operation intends to contract out part of its operation to a third party, such person may pay to its contractor funds for occupational safety and health management in an adequate amount as calculated accounting for the level of hazard associated with the applicable operation within the budgetary constraints of the funds for occupational safety and health management as budgeted in the contract price or project cost so that such contractor may use the funds.

(2) Any employer as set forth in Article 30 (3) of the Act (or its contractor employer if the contractor employer is to use funds pursuant to paragraph (1)) shall use such funds for occupational safety and health management as budgeted for the applicable construction project as prescribed by the Minister of Employment and Labor to prevent industrial accidents and health problems of the workers employed by it and its contractor, prepare a record of the funds disbursed, and retain the record for a period of one year following the completion of the project. [<Amended July 12, 2010>](#)

(3) The phrase “person ... as prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 30 (4) of the Act shall refer to any person who undertakes a construction project costing no less than 3 hundred million won (or 1 hundred million won in the case of an electrical construction project under the Electrical Construction Business Act or an information and communication project under the Information and Communication Work Business Act) but less than 12 billion won (or 15 billion won in the case of any project falling within the scope of civil engineering projects as set forth in Table 1 of the Enforcement Decree of the Framework Act on the Construction Industry), excluding, however, any person undertaking any of the following projects: [<Amended July 12, 2010>](#)

1. any project for which the work period is less than three months;
2. any project undertaken in an insular area not connected to the mainland (excluding Jeju Special Self-Governing Province);
3. any project for which the employer appoints a person with safety manager qualifications as set forth in Table 4 of the Decree (including any group of three or less projects managed by the same employer within the jurisdiction of the same regional government for which the employer appoints one person with safety manager qualifications) dedicated to the duties of a safety

manager as set forth in each subparagraph of Article 13 (1) of the Decree, where such employer shall submit to the head of the competent local labor authority a Report of the Appointment etc. of Safety Managers (Construction Sector) in the form of Schedule 1-2 (2); or

4. any project for which a plan for the prevention of harms and hazards is required to be submitted under Article 48 (3) of the Act.

<Wholly amended Aug. 7, 2009>

Article 32-2 (Standards for Staffing, Facilities and Equipment of Accident Prevention Consulting Organization)

The standards for the staffing, facilities and equipment of an accident prevention consulting organization under Article 26-7 of the Decree shall be as set forth in Table 6-3.

<Wholly amended Aug. 7, 2009>

Article 32-3 (Standards for Consulting Provided by Accident Prevention Consulting Organization)

The standards for the consulting services provided by an accident prevention consulting organization under Article 26-7 of the Decree shall be as set forth in Table 6-4.

<Wholly amended Aug. 7, 2009>

Article 32-4 (Application for Designation etc. of Accident Prevention Consulting Organization)

(1) Any person intending to be designated as an accident prevention consulting organization pursuant to Article 26-9 of the Decree shall file with the head of the regional employment and labor office an application for designation of an accident prevention consulting organization in the form of Schedule 4 (including any electronic application) as well as the following documents as attached thereto: <Amended July 12, 2010; Mar. 3, 2011; Jan. 26, 2012>

1. its Articles of Incorporation (or a registration under Article 136-8 in the case of an occupational safety consultant);
2. licenses (other than national technical qualifications), career certificates, certificates of employment and other documents evidencing the qualifications and employment of the persons meeting the staffing standards as set forth in

Table 6–3; and

3. photocopies of building lease agreements or any other documents and facility and equipment specifications evidencing that an office is maintained.

(2) Upon receiving an application under paragraph (1), the head of the regional employment and labor office shall verify the certificate of corporate register entries and national technical qualifications by accessing administrative information shared under Article 36 (1) of the Electronic Government Act, and require the applicant to attach photocopies of national technical qualifications to the application unless the applicant consents to such verification. <Amended Mar. 3, 2011>

(3) Upon receiving an application for designation of an accident prevention consulting organization under paragraph (1), the head of the regional employment and labor office shall review the application against the standards for staffing, facilities and equipment as set forth in Article 32–2 and then either reject the application or issue to the applicant a certificate of designation in the form of Schedule 5 within twenty one days of such receipt. <Amended July 12, 2010>

(4) The provisions of Articles 18 (4) through 18 (6) shall be applicable *mutatis mutandis* to, *inter alia*, the reissuance of certificates of designation of accident prevention consulting organizations, the modification of designation, and the return of certificates of designation.

(5) If any person who has been designated as an accident prevention consulting organization in the electrical and/or information and communication sector pursuant to Article 30 (5) of the Act intends to use the same combination of personnel, facilities and equipment to provide accident prevention consulting services spanning both the jurisdiction of the regional employment and labor office that has issued the designation and that of another regional employment and labor office adjacent thereto, such person shall file for designation with each head of such competent regional employment and labor offices. In which case, the head of the adjacent regional employment and labor office shall consult with the head of the applicable regional employment and labor office to determine whether to issue designation. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 32–5 Deleted. <Aug. 7, 2009>

Article 32-6 (Consulting, Supervision etc. Provided by Accident Prevention Consulting Organization)

The provisions of Article 24 shall be applicable mutatis mutandis to the consulting and supervision services provided by an accident prevention consulting organization.

<Wholly amended Aug. 7, 2009>

CHAPTER III IN-HOUSE SAFETY AND HEALTH TRAINING

Article 33 (Training Hours and Content)

(1) The training hours to be provided by the employer for its workers under the provisions of Articles 31 (1) through 31 (3) shall be as set forth in Table 8, and the content of the training as set forth in Table 8-2.

(2) The Minister of Employment and Labor shall prescribe and publish methods for the training under paragraph (1) and any other matters necessary for the training. <Amended July 12, 2010>

(3) The persons who are permitted to deliver training courses if the employer provides its workers with in-house safety and health training under the provisions of Articles 31 (1) through 31 (3) shall be any of the following persons: <Amended July 12, 2010>

1. safety and health managers, supervisors, safety managers (including employees of the safety management service provider), health managers (including employees of the health management service provider), and occupational physicians as set forth in the provisions of Articles 13 through 17 of the Act;
2. any person who has completed an instructor training course for the applicable sector as provided by the Agency;
3. any occupational safety consultant or occupational hygiene consultant; or
4. any person having academic knowledge and professional experience with occupational safety and health who meets such standards as prescribed by the Minister of Employment and Labor.

<Wholly amended Aug. 7, 2009>

Article 33-2 (Exemption from Safety and Health Training)

(1) If the level of accidents and other considerations for a workplace meet such standards as prescribed by the Minister of Employment and Labor, the Minister

of Employment and Labor may exempt the employer of such workplace from part of safety and health training to be provided under Article 31 (1) of the Act.

[<Amended July 12, 2010>](#)

(2) If an employer has provided special training under Article 31 (3) of the Act, the Minister of Employment and Labor shall exempt such employer from its obligation to provide those workers who have completed the special training courses with the training that would otherwise be required upon hiring or changes in work activities under paragraph (2) of the same Article.

[<Amended July 12, 2010>](#)

(3) If an employer has had its supervisors complete such training courses as prescribed by the Minister of Employment and Labor; the Minister of Employment and Labor shall exempt such employer from its obligation to provide periodical safety and health training for the applicable year under Article 31 (1) of the Act.

[<Amended July 12, 2010>](#)

(4) If an employer has provided the training required upon hiring under Article 31 (2) of the Act or special training under paragraph (3) of the same Article for certain workers having experience with the applicable activities, the Minister of Employment and Labor may exempt the employer from its obligation to provide part of the training upon hiring or special training as prescribed by the Minister of Employment and Labor.

[<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 34 *Deleted.* [<Aug. 7, 2009>](#)

Article 35 *Deleted.* [<Aug. 7, 2009>](#)

Article 36 *Deleted.* [<Nov. 23, 1995>](#)

Article 37 (Training Materials etc.)

(1) Where the employer or a training provider under Article 31 (4) of the Act provides training under Article 33, such training materials suitable for the content of training for each type of trainees as set forth in Table 8-2 shall be used.

(2) Where the Agency or a training provider under paragraph (1) has provided training under Article 33 as engaged by the employer, such certificate of completion of training as prescribed by the Minister of Employment and Labor

shall be issued. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 37-2 (Hours, Content, Methods etc. of Basic Safety and health Training for Construction Sector)

(1) The hours of basic safety and health training for the construction sector under Article 31-2 (1) of the Act (hereinafter referred to as “basic training for the construction sector”) shall be as set forth in Table 8, and the content of the training as set forth in Table 8-2.

(2) Where a training provider registered under Article 31-2 (1) of the Act (hereinafter referred to as a “basic training provider for the construction sector”) provides basic training for the construction sector, such training materials suitable for the content of training as set forth in Table 8-2 shall be used, and such persons meeting the staffing standards as set forth in Table 6-3 of the Decree be posted.

(3) Except where provided in paragraphs (1) and (2), the Minister of Employment and Labor shall prescribe and publish matters concerning the administration of trainees and any other matters necessary for the training.

<Article added Jan. 26, 2012>

Article 37-3 (Application for Registration etc. of Basic Training Provider for Construction Sector)

(1) Any person intending to be registered as a basic training provider for the construction sector under Article 26-12 (1) of the Decree shall file with the Agency an application for registration in the form of Schedule 9-2 and the following documents as attached thereto:

1. documents evidencing that the applicant falls within the scope as set forth in any subparagraph of Article 26-11 of the Decree;
2. licenses (other than national technical qualifications), diplomas, career certificates, certificates of employment and other documents evidencing that the staffing standards as set forth in Table 6-3 of the Decree are met; and
3. specifications of facilities and equipment and other documents evidencing that the standards for facilities and equipment as set forth in Table 6-3 of the Decree are met.

(2) Upon receiving an application for registration as set forth in paragraph (1),

the Agency shall verify the following documents by accessing administrative information shared under Article 36 (1) of the Electronic Government Act; provided, however, that the applicant shall be required to attach photocopies of the documents as set forth in subparagraphs 1 and 3 unless the applicant consents to such verification:

1. national technical qualifications;
2. a certificate of corporate register entries (for legal entities only); and
3. a taxpayer registration certificate (for sole proprietors only).

의견) “사업자등록”은 “taxpayer registration”이 정확함.

(3) Upon receiving an application for registration under paragraph (1), the Agency shall verify whether the application meets requirements under Article 26-11 of the Decree within fifteen days of such receipt, and notify the Minister of Employment and Labor thereof if the requirements are met.

(4) Within seven days of notification under paragraph (3), the Minister of Employment and Labor shall notify the Agency of whether the application is suitable for registration. The Agency shall promptly issue to the applicant a certificate of registration in the form of Schedule 9-3 if it is notified that the application is suitable for registration.

(5) If a basic training provider for the construction sector intends to make modifications with respect to its registration under Article 26-12 (2) of the Decree, the provider shall submit to the Agency an application for modification in the form of Schedule 9-2 as well as its certificate of registration and documents evidencing such modifications.

(6) Paragraphs (3) and (4) shall be applicable mutatis mutandis to the modification of registration under paragraph (5); provided, however, that the Agency may issue a modified certificate of registration without notifying the Minister of Employment and Labor if statements in the certificate are to be modified.

<Article added Jan. 26, 2012>

Article 37-4 (Evaluation etc. of Basic Training Provider for Construction Sector)

(1) The criteria against which a basic training provider for the construction sector is to be evaluated shall be as follows:

1. facts concerning the administration of training courses;

2. the levels of staffing, facilities and equipment maintained and the level of utilization thereof; and

3. the adequacy and completeness of training services

(2) The Minister of Employment and Labor shall prescribe and publish necessary matters concerning, inter alia, methods for the evaluation of basic training providers for the construction sector and the disclosure of evaluation results.

[<Article added Jan. 26, 2012>](#)

Article 37-5 (Revocation of Registration of Basic Training Provider for Construction Sector)

(1) If the Agency has verified any facts falling within the scope of events warranting revocation etc. under Article 32-3 of the Act, the Agency shall submit to the head of the local labor authority exercising jurisdiction over the location of the applicable provider a report thereon as well as documents evidencing such facts as attached thereto.

(2) If the head of the local labor authority has approved revocation etc. under Article 32-3 of the Act, such head shall notify the Agency thereof.

[<Article added Jan. 26, 2012>](#)

CHAPTER IV JOB TRAINING ETC. [<Amended Aug. 7, 2009>](#)

SECTION 1 Training of Managers et al.

Article 38 *Deleted.* [<Sep. 18, 2008>](#)

Article 39 (Job Training for Safety and Health Managers et al.)

(1) Pursuant to Article 32 (1), any of the following persons shall complete such initial training course as may be necessary to perform one' s duties within three months (or one year in the case of a health manager who is also a physician) days of appointment (or commission; hereinafter the same shall apply) to the applicable position, and also complete such refresher training course in safety and health management responsibilities as provided by the Minister of Employment and Labor within a period starting three months after every second anniversary of the completion of the initial training and ending three months thereafter.

[<Amended July 12, 2010>](#)

1. safety and health managers;
2. safety managers (including any persons deemed to have been hired as safety managers under Article 30 (3) of the Act on Special Measures for the Deregulation of Corporate Activities);
3. health managers; and
4. any persons providing consulting services as employed by accident prevention consulting organizations under Article 26-7 of the Decree.

(2) The hours of initial and refresher training under paragraph (1) (hereinafter referred to as “job training”) shall be as set forth in Table 8, and the content thereof as set forth in Table 8-2.

(3) The Minister of Employment and Labor shall prescribe and publish such methods for group training, on-the-job training, Internet-based remote training etc. as may be necessary to provide job training as well as the manner of administration of job training providers and any other matters necessary for the training. <Amended July 12, 2010>

(4) Any person intending to complete job training shall submit an application for a job training course in the form of Schedule 2 to the head of an organization retained to provide job training services under Article 47 (2) of the Decree (hereinafter referred to as a “job training provider”).

(5) The head of a job training provider shall inform trainees of the date, time, place etc. of training no later than fifteen days prior to the first day of training.

(6) If any person having completed job training leaves a workplace and then is newly appointed to a position at another workplace, such person shall be deemed to have completed a training course provided that a certificate of completion of the course completed prior to the change in employment is submitted at the time of filing a notice of appointment.

(7) If the head of a job training provider intends to deliver job training, such head shall submit (either physically or by electronic means) a training program for a given year to the Minister of Employment and Labor for approval no later than December 31 of the immediately preceding year. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 39-2 (Application for Registration etc. of Job Training Provider)

(1) Any organization intending to be registered as a job training provider under Article 32 (3) of the Act shall file with the Minister of Employment and Labor an

application for registration in the form of Schedule 9-4 and the following documents as attached thereto:

1. documents evidencing that the applicant falls within the scope as set forth in any subparagraph of Article 26-14 of the Decree;
2. licenses (other than national technical qualifications), diplomas, career certificates, certificates of employment and other documents evidencing that the staffing standards as set forth in Table 6-4 of the Decree are met; and
3. specifications of facilities and equipment and other documents evidencing that the standards for facilities and equipment as set forth in Table 6-4 of the Decree are met.

(2) Upon receiving an application for registration as set forth in paragraph (1), the Minister of Employment and Labor shall verify the following documents by accessing administrative information shared under Article 36 (1) of the Electronic Government Act; provided, however, that the applicant shall be required to attach photocopies of the documents as set forth in subparagraphs 1 and 3 unless the applicant consents to such verification:

1. national technical qualifications;
2. a certificate of corporate register entries (for legal entities only); and
3. a taxpayer registration certificate (for sole proprietors only).

(3) The Minister of Employment and Labor shall issue to the applicant a certificate of registration in the form of Schedule 9 within thirty days of receipt of an application for registration under paragraph (1) if such application meets the requirements as set forth in Article 26-14 of the Decree.

(4) If any person having completed registration under Article 26-14 of the Decree intends to make modifications with respect to the registration, the applicant shall submit to the Minister of Employment and Labor an application for modification in the form of Schedule 9-4 as well as its certificate of registration and documents evidencing such modifications. In which case, paragraph (3) shall be applicable mutatis mutandis with respect to the processing of the application for modification.

<Article added Jan. 26, 2012>

Article 39-3 (Provisions Applicable Mutatis Mutandis)

The provisions of Article 37-4 shall be applicable mutatis mutandis to the evaluation of any organization registered as a job training provider under Article

32-2 of the Act.

<Article added Jan. 26, 2012>

Article 40 (Exemption from Job Training)

(1) Any person falling within the scope of either subparagraph 8 or 9 of Table 4 of the Decree or any person providing consulting services as employed by an accident prevention consulting organization shall be exempt from initial job training.

(2) Any person falling within the scope of any item of subparagraph 11 of Table 4 of the Decree, any person deemed to have been hired as a safety manager under subparagraph 4 or 5 of Article 30 (3) of the Act on Special Measures for the Deregulation of Corporate Activities, or any health manager falling within the scope of either subparagraph 1 or 2 of Table 6 of the Decree shall be exempt from refresher job training, provided that such person has completed a training course provided by a training provider under the applicable laws that covers such content under Article 39 (2) as prescribed by the Minister of Employment and Labor and submitted a certificate of completion issued by such training provider.

<Amended July 12, 2010>

(3) Any person falling within the scope of Article 39 (1) shall be exempt from refresher job training provided that such person has completed a safety and health training course as prescribed and published by the Minister of Employment and Labor. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 41 *Deleted.* <Mar. 21, 1992>

SECTION 2 Training for Inspectors <Amended Sep. 18, 2008>

Article 42 *Deleted.* <Aug. 28, 1999>

Article 43 (Inspector Training)

(1) The Minister of Employment and Labor may cause the Agency or a training provider specialized in the applicable field to provide inspector training courses designed to produce persons responsible for performance examination in terms of the safety of harmful and/or hazardous machinery etc. at a workplace under

Article 36-2 of the Act (hereinafter referred to as “inspectors”) if the Minister takes into account the availability of inspectors and deems such training necessary. <Amended July 12, 2010>

(2) The hours of training under paragraph (1) shall be as set forth in Table 8, and the content thereof as set forth in Table 8-2.

(3) The Minister of Employment and Labor shall prescribe methods for the training under paragraph (1) and such matters concerning the standards for the staffing, facilities, equipment etc. of the training provider as may be necessary for the training. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 43-2 *Deleted.* <Aug. 28, 1999>

SECTION 3 *Deleted.* <Aug. 28, 1999>

Article 44 *Deleted.* <Aug. 28, 1999>

Article 45 *Deleted.* <Aug. 28, 1999>

Article 45-2 *Deleted.* <Aug. 28, 1999>

CHAPTER V PROTECTIVE MEASURES FOR MACHINERY AND APPARATUS <Amended Sep. 18, 2008>

Article 46 (Protective Measures)

(1) The protective devices required to be installed on machinery and/or apparatus under any subparagraph of Table 7 of the Decree pursuant to Article 33 (1) of the Act and 27 (1) of the Decree shall be as follows: <Amended July 12, 2010; Jan. 26, 2012>

1. blade guards on grass trimmers as set forth in subparagraph 1 of Table 7 of the Decree;
2. rotator guards on centrifugal machines as set forth in subparagraph 2 of Table 7 of the Decree;
3. pressure relief valves on air compressors as set forth in subparagraph 3 of Table 7 of the Decree;

4. blade guards on metal shearing machines as set forth in subparagraph 4 of Table 7 of the Decree;
5. head guards and backrests on forklift trucks as set forth in subparagraph 5 of Table 7 of the Decree; and
6. safety interlocks on the moving parts of packaging machines set forth in subparagraph 6 of Table 7 of the Decree.

7. *Deleted.* <Jan. 26, 2012>

8. *Deleted.* <Jan. 26, 2012>

9. *Deleted.* <Jan. 26, 2012>

10. *Deleted.* <Jan. 26, 2012>

11. *Deleted.* <Jan. 26, 2012>

12. *Deleted.* <Jan. 26, 2012>

13. *Deleted.* <Jan. 26, 2012>

14. *Deleted.* <Jan. 26, 2012>

(2) Apart from the measures as set forth in paragraph (1), the following guarding shall be provided on the machinery and apparatus under paragraph (1) that are power-driven.

1. Protrusions at the point of operation shall be either buried or enclosed.
2. Power transmissions and speed controls shall be either enclosed or protected with protective nets.
3. Nip points of rotating machinery (rollers, gears etc.) shall be enclosed or fenced.

(3) The Minister of Employment and Labor shall prescribe and publish such matters as may be necessary to provide guarding as set forth in paragraphs (1) and (2). <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 46-2 *Deleted.* <Sep. 18, 2008>

Article 46-3 *Deleted.* <Sep. 18, 2008>

Article 46-4 *Deleted.* <Sep. 18, 2008>

Article 46-5 *Deleted.* <Sep. 18, 2008>

Article 46-6 *Deleted.* <Sep. 18, 2008>

Article 46-7 *Deleted.* <Sep. 18, 2008>

Article 46-8 *Deleted.* <Sep. 18, 2008>

Article 46-9 *Deleted.* <Sep. 18, 2008>

Article 46-10 *Deleted.* <Sep. 18, 2008>

Article 46-11 *Deleted.* <Sep. 18, 2008>

Article 46-12 *Deleted.* <Sep. 18, 2008>

Article 46-13 *Deleted.* <Sep. 18, 2008>

Article 47 (Maintenance of Performance)

The employer shall perform inspection and maintenance on an ongoing basis so that protective measures under Article 46 remain fully functional.

<Wholly amended Aug. 7, 2009>

Article 48 (Compliance by Workers and Measures by Employer)

(1) With respect to the guarding measures under Articles 46 (1) and 46 (2), workers shall:

1. where it is intended to dismantle protective measures : dismantle the devices with the permission of the employer;
2. where protective measures are dismantled and then the reason therefor ceases to exist: promptly restore the devices to their original condition; and
3. where it is discovered that protective measures are not functional: promptly notify the employer.

(2) Upon notification under paragraph (1) 3, the employer shall immediately take appropriate measures including repairs, maintenance and the halting of work.

<Wholly amended Aug. 7, 2009>

CHAPTER VI LEASING OF HAZARDOUS MACHINERY,

APPARATUS, EQUIPMENT, BUILDINGS ETC. <Amended Aug. 7, 2009>

Article 49 (Measures by Lessor of Machinery etc.)

(1) The measures against harms and hazards required to be taken by any person leasing out hazardous machinery, apparatus and/or equipment (hereinafter referred to as “machinery etc.”) to another person under Article 33 (2) of the Act and Article 27 (2) of the Decree shall be as follows:

1. If an advance inspection of the applicable machinery etc. has led to the discovery of abnormalities, the machinery etc. shall immediately be repaired or otherwise serviced as may be necessary.
2. The lessee of the applicable machinery etc. shall be issued written statements of the following:
 - a. the capacity of such machinery etc. and protective measures details;
 - b. the properties of such machinery etc. and precautions to be taken in using the machinery etc.; and
 - c. a statement of repairs, servicing and inspection on such machinery etc. and the dates of manufacture of primary components.

(2) The provisions of paragraph (1) shall not be applicable where the applicable machinery etc. are leased to select among different models of the machinery etc.

<Wholly amended Aug. 7, 2009>

Article 50 (Measures by Lessor of Machinery etc.)

(1) Any person leasing machinery etc. under Article 33 (2) of the Act shall take the following measures if a third party who is not a worker employed such person is allowed to operate the machinery etc.:

1. Verify whether the person operating the machinery etc. has such qualifications or skills as prescribed by applicable law.
2. Provide the person operating the machinery etc. with an understanding of the following:
 - a. details of work;
 - b. chain of command;
 - c. methods of communication, signaling etc.;
 - d. matters concerning routes of operation, speed limits and any other matters concerning the operation of the machinery etc.; and
 - e. any other matters as may be necessary to prevent industrial accidents

resulting from the operation of the machinery etc.

(2) Where any person having leased machinery etc. under paragraph (1) returns the same to the lessor, such person shall issue written statements of, inter alia, repairs, servicing and inspection on such machinery etc., and parts replaced.

<Wholly amended Aug. 7, 2009>

Article 51 (Obligation of Operator of Machinery etc.)

Any person operating machinery etc. under Article 50 shall comply with the provisions of each item of Article 50 (1) 2.

<Wholly amended Aug. 7, 2009>

Article 52 (Keeping and Retention of Records of Leasing of Machinery etc.)

Any person leasing machinery etc. shall keep and retain records of its operation concerning the lease of the machinery etc. in the form of Schedule 10.

<Wholly amended Aug. 7, 2009>

Article 53 (Emergency Exits etc. for Joint Use)

Any person leasing out a building under Article 33 (2) of the Act and Article 27 (2) of the Decree shall install, emergency exits, anti-slip studs in hallways, emergency ladders etc. If such person leases out a building for joint use by two or more employers, the applicable exits etc. shall be maintained with markings of “for emergency” so that they may be readily used.

<Wholly amended Aug. 7, 2009>

Article 54 (Alarms etc. for Public Use)

If the employer leasing a building manufactures and/or handles hazardous, explosive or ignitable flashing substances or if the number of workers who are employed by the employer leasing a building and work in the building is fifty or more, the person leasing out the building shall have in place automatic alarms, alarm bells and other alarm equipment that may quickly alert relevant workers in emergency, and/or megaphones and other alarm devices and keep them in operational.

<Wholly amended Aug. 7, 2009>

Article 55 (Joint Use of Leased Factory Building)

Any person leasing out a factory building with any of the following devices installed shall inspect, repair and take other necessary measures for any of the following devices so that they remain fully functional if all or any of such devices are jointly used by two or more lessors of the building:

1. local ventilation systems;
2. general ventilation systems; and
3. exhaust gas treatment systems

<Wholly amended Aug. 7, 2009>

Article 56 (Accommodation)

Any person leasing out a building shall accommodate the requests of the employer leasing the building for: the approval for the modification of the building pertaining to the installation of a local ventilation system, partition walls to reduce noise, and any other equipment as may be necessary to prevent industrial accidents, such use of facilities as may be necessary for the installation of such equipment etc.

<Wholly amended Aug. 7, 2009>

Article 57 (Consistency in Alarm Signals and Signs)

Any person leasing out a building shall ensure consistency in alarm signals to be used in the event of a fire or a leakage of harmful chemicals or in any other emergency and the employer leasing the building thereof.

<Wholly amended Aug. 7, 2009>

Article 57-2 *Deleted.* <Sep. 18, 2008>

CHAPTER VII Safety Certification <Amended Sep. 18, 2008>

Article 58 (Safety Certification Obligation of Importers)

Pursuant to the proviso of Article 34 (2) of the Act, an importer may obtain safety certification in any of the following cases: <Amended July 12, 2010>

1. where any machinery, apparatus and equipment as set forth in Article 28 (1) 1 of the Decree are imported as used;
2. where machinery, apparatus etc. subject to mandatory safety certification as set forth in Article 34 (2) of the Act (hereinafter referred to as “machinery,

apparatus etc. subject to mandatory safety certification”) are imported in such quantities as prescribed and published by the Minister of Employment and Labor; or

3. where any machinery, apparatus and equipment as set forth in Article 28 (1) 1 of the Decree are imported as used after being subjected to documentary examinations and individual product examinations.

<Wholly amended Aug. 7, 2009>

Article 58-2 (Exemption from Safety Certification)

(1) Pursuant to Article 34 (3) of the Act, any item of machinery, apparatus etc. subject to mandatory safety certification shall be fully exempt from safety certification under Article 34 (2) of the Act in any of the following cases:

<Amended Mar. 3, 2011; Jan. 26, 2012>

1. where such item is manufactured or imported for research and development purposes or manufactured for export purposes;
2. where such item has undergone an inspection under Article 17 (1) of the High-Pressure Gas Safety Control Act;
3. where such item has undergone an inspection under Articles 39 (1) and 39 (1) of the Energy Use Rationalization Act;
4. where such item has undergone an inspection under Article 63 of the Electric Utility Act;
5. where such item has undergone an inspection under Articles 26 (1) 1 and 26 (1) 2 of the Harbor Act;
6. where such item has undergone an inspection under Article 9 of the Mining Safety Act that is required upon the installation or modification of mining facilities;
7. where such item has undergone an inspection under subparagraphs 1, 2 and 3 of Article 13 (1) of the Construction Machinery Management Act or been issued type approval under Article 18 of the same Act, or where a declaration of conformity has been filed for such item under the same Article;
8. where such item has undergone an inspection under Article 7 of the Ship Safety Act;
9. where such item has undergone an inspection under Article 16 (1) of the Atomic Energy Act;
10. where such item has been issued type approval under Article 36 (1) of the

Installation, Maintenance, and Safety Control of Fire-Fighting System Act;

11. where such item has been subjected to quality assurance under Article 28 (1) of the Defense Acquisition Program Act; or

12. where such item has undergone a tank safety performance inspection under Article 8 of the Safety Control of Dangerous Substances Act .

(2) If, for any item of machinery, apparatus etc. subject to mandatory safety certification, the levels required in any of the following certification or tests or any part thereof are deemed equal to or surpass the levels required in the safety certification as set forth in the former part of Article 34 (1) of the Act, such item shall be exempt from the safety certification as set forth in the former part of Article 34 (1) of the Act with respect to the applicable certification or tests or part thereof only: <Amended July 12, 2010>

1. where such item has been certified by an overseas safety certification organization as prescribed and published by the Minister of Employment and Labor;

2. where safety certification under Article 14 of the Quality Control and Safety Management of Industrial Products Act has been obtained;

3. where such item has been certified under Article 15 of the Industrial Standardization Act has been obtained;

4. where such item has been subjected to tests conducted by a testing and inspection agency under the Framework Act on National Standards; or

5. where such item has been certified under the International Electrotechnical Commission System for the Certification to Standards for Electrical Equipment for Explosive Atmospheres (IECEx) Scheme.

(3) Any person manufacturing or importing any machinery, apparatus etc. subject to mandatory safety certification that are exempt from safety certification shall submit to a safety certification organization an application for exemption from safety certification in the form of Schedule 10-2 as well as the following documents as attached thereto prior to the release or customs clearance of the applicable item:

1. a description of the product and its use;

2. documents evidencing that such item is used for research and development purposes (in the case as set forth in paragraph (1) 1 only);

3. safety certificates and test certificates issued by an overseas safety certification organization (in the case as set forth in paragraph (2) 1 only);

and

4. test certificates and documents evidencing that such item has been certified or tested under other laws (in the case as set forth in paragraphs (1) 2 through (1) 8 and 2 (2) through 2 (5) only).

(4) Upon receiving an application for exemption from safety certification under paragraph (3), the safety certification organization shall verify such application and then issue a certificate of exemption from safety certification in the form of Schedule 10-3.

<Wholly amended Aug. 7, 2009>

Article 58-3 (Application etc. for Safety Certification)

(1) Any person intending to obtain safety certification under Articles 34 (2) and 34 (4) of the Act (hereinafter referred to as “safety certification”) shall submit (either physically or by electronic means) to an organization commissioned to provide safety certification services under Article 47 (2) of the Decree (hereinafter referred to as a “safety certification organization”) an application for safety certification in the form of Schedule 10-4 for the applicable type of assessment as set forth in Articles 58-4 (1) and 58-4 (2) as well as the documents as set forth in Table 8-3 as attached thereto. In such case, any person manufacturing machinery, apparatus etc. subject to safety certification under Article 34 (1) of the Act (hereinafter referred to as “machinery, apparatus etc. subject to safety certification”) at an overseas site may designate a Korea resident as its representative to file for safety certification.

(2) Where an application for safety certification is filed under paragraph (1), samples necessary for safety certification assessments shall be submitted as prescribed and published by the Minister of Employment and Labor. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 58-4 (Types and Methods of Safety Certification Assessments)

(1) The assessments conducted by a safety certification organization to verify whether machinery, apparatus etc. subject to safety certification meet the standards for safety certification (hereinafter referred to as the “safety certification standards”) shall be as follows: <Amended July 12, 2010; Mar. 3,

2011>

1. preliminary assessments: an assessment conducted to verify whether machinery, apparatus, protective devices, personal protective equipment are subject to safety certification (only where safety certification has been applied for under Article 34 (4) of the Act);
2. documentary assessments: an assessments conducted to verify design drawings and each kind or type of machinery, apparatus etc. subject to safety certification as well as other documents on the technologies thereof meet the safety certification standards under Article 34 (1) of the Act;
3. assessment of technical capabilities and production systems: an assessment conducted to verify whether such technical capabilities and production system required at the workplace as may be necessary to continue to maintain and ensure the safety performance of machinery, apparatus etc. subject to safety certification, meet the safety certification standards; provided, however, that the assessment of technical capabilities and production systems shall be omitted in any of the following cases:
 - a. where the importer has obtained safety certification under the proviso of Article 34 (2) of the Act;
 - b. where an individual product assessment as set forth in subparagraph 4 a is conducted; or
 - c. where the safety certification of machinery, apparatus etc. subject to mandatory safety certification is being sought after safety certification of machinery, apparatus etc. of the same kind manufactured using the same process (only where the safety certification has been obtained through a product type assessment as set forth in subparagraph 4 b) is obtained; and
4. product assessment: an assessment conducted to verify whether machinery, apparatus etc. subject to safety certification are consistent with findings in the documentary assessment and whether the safety performance of machinery, apparatus etc. subject to safety certification meets the safety certification standards. Either of the following assessments shall be conducted in accordance with the criteria as prescribed and published by the Minister of Employment and Labor for each item:
 - a. individual product assessment: an assessment conducted on all machinery, apparatus etc. subject to safety certification if findings of the

documentary assessment meet the safety certification standards (the documentary assessment and individual product assessment may be concurrently conducted if so requested by the person intending to obtain safety certification); or

- b. product type assessment: an assessment conducted on such samples of machinery, apparatus etc. subject to safety certification as drawn by product type if findings of the documentary assessment and the assessment of technical capabilities and production systems meet the safety certification standards (the documentary assessment the assessment of technical capabilities and production systems, and the product type assessment may be concurrently conducted if so requested by the person intending to obtain safety certification).

(2) The Minister of Employment and Labor shall prescribe and publish the procedures and methods of the assessment of machinery, apparatus etc. subject to safety certification conducted assessment by kind or type under paragraph (1).

<Amended July 12, 2010>

(3) Upon receiving an application for safety certification under Article 58-3 (1), the safety certification organization shall complete assessments within the following periods for each type of assessment; provided, however, that the assessment period for the product assessment may be extended by up to fifteen days if any unavoidable circumstances prevent the organization from completing the assessment within the period:

1. preliminary assessment: seven days;
2. documentary assessment: fifteen days (or thirty days if the product is manufactured overseas);
3. assessment of technical capabilities and production systems: thirty days (or forty five days if the product is manufactured overseas); or
4. product assessment:
 - a. individual product assessment: fifteen days; or
 - b. product type assessment: thirty days (or sixty days for guarding devices under Article 28 (1) 2 g of the Decree and protective equipment under items a through h of subparagraph 3 of the same Article).

(4) Upon completion of assessments under paragraph (3), the safety certification organization shall issue to the applicant a notice of assessment results in the form of Schedule 10-5. If the assessment results indicate that all requirements

are met, a safety certificate in the form of Schedule 10-6 shall be issued as well.

(5) Where any extraordinary structure or materials of machinery, apparatus etc. subject to mandatory safety certification render it impractical to apply any of the safety certification standards, the safety certification organization may omit such safety certification standards or incorporate more standards in conducting assessments under subparagraph 2 or 4 of paragraph (1) by referring to the Korean Industrial Standards under the Industrial Standardization Act or relevant international standards (i) if the applicable product is deemed to achieve a level of safety performance no lower than the level required in the safety certification standards and (ii) if the applicant so requests or such omission or incorporation is deemed necessary. <Added Mar. 3, 2011>

(6) A safety certification organization shall establish and maintain the safety certification assessment committee to deliberate and resolve on (i) whether to deem machinery, apparatus etc. subject to mandatory safety certification as having a level of safety performance no lower than the level required in the safety certification standards and (ii) what safety certification standards to omit or incorporate for the applicable machinery, apparatus etc. subject to mandatory safety certification. In such case, the duration of time taken to organize the safety certification assessment committee and hold meetings shall not be included in the assessments period under the provision of paragraph (3). <Added Mar. 3, 2011>

(7) The Minister of Employment and Labor shall prescribe and publish such matters as may be necessary for, inter alia, the organization, function and operation of the safety certification assessment committee as set forth in in paragraph (6). <Added Mar. 3, 2011>

<Wholly amended Aug. 7, 2009>

Article 58-5 (Method, Frequency etc. of Verification)

(1) Pursuant to Article 34 (5) of the Act, the safety certification organization shall verify the following for each manufacturer who has obtained safety certification:

1. whether the applicable machinery, apparatus etc. are being produced at such manufacturing workplace as stated in the safety certificate;
2. whether machinery, apparatus etc. subject to safety certification that have

received safety certification meet safety certification standards (in which case, the provisions of Article 58-4 (1) 4 shall be applicable mutatis mutandis to the types and methods of assessments);

3. whether the manufacturer continue to maintain such technical capabilities and production systems as were when the safety certification was obtained; and
4. whether the machinery, apparatus etc. subject to safety certification incorporate the materials and parts equivalent to or better than as reviewed in documentary assessments.

(2) Pursuant to Article 34 (5) of the Act, the safety certification organization shall verify, every year, whether the manufacturer who has obtained safety certification continues to meet safety certification standards; provided, however, that such verification may be made once every two years if all of the following conditions are met: [<Amended Jan. 26, 2012>](#)

1. if the manufacturer has not been subjected to any revocation of safety certification or any order to suspend the use of safety certification marks or take remedial measures under Article 34-3 (1) of the Act within the last two years; and
2. if the last two verifications establish that the technical capabilities and production systems meet or surpass such standards as prescribed by the Minister of Employment and Labor.

(3) Upon completion of verification under paragraphs (1) and (2), the safety certification organization shall issue to the manufacturer a notice of safety certification verification in the form of Schedule 10-7.

(4) If verification under paragraphs (1) and (2) leads to the discovery of any facts falling within the scope of any subparagraph of Article 34-3 (1) of the Act, the safety certification organization shall promptly deliver to the head of the local labor authority exercising jurisdiction over the workplace manufacturing the machinery, apparatus etc. subject to safety certification (or the domicile of a representative of the manufacturer if the manufacturer is located in another country; or the location of such safety certification organization if no representative exists) a notice thereof and documents evidencing such facts as attached thereto. [<Amended July 12, 2010; Jan. 26, 2012>](#)

(5) If an exemption from safety certification is granted with respect to part of certification or tests only a part of assessment terms under Article 58-2 (2) 1, the safety certification organization may require and receive written findings of

the safety certification verification completed by the applicable overseas safety certification organization and omit, in whole or in part, the verification under Article 34 (5) of the Act. <Added Mar. 3, 2011>

<Wholly amended Aug. 7, 2009>

Article 58-6 (Recording, Retention etc. of Materials on Safety-Certified Products)

Any person having obtained safety certification shall keep and retain records of information on each safety-certified product under Article 34 (6) of the Act.

<Article added Jan. 26, 2012>

<Former Article 58-6 renumbered as Article 58-8 <Jan. 26, 2012>>

Article 58-7 (Submission etc. of Materials on Mandatory Safety Certification)

Where the head of the local labor authority requires any person manufacturing, importing or selling machinery, apparatus etc. subject to mandatory safety certification to submit materials under Article 34 (7) of the Act, such requirement shall be made in writing, stating a period of time no less than ten days for the materials to be submitted, which period, however, may be extended by up to thirty days upon request if there are any unavoidable circumstances.

<Article added Jan. 26, 2012>

<Former Article 58-7 renumbered as Article 58-9 <Jan. 26, 2012>>

Article 58-8 (Safety Certification Marks)

(1) Such safety certification marks and the manner of marking for machinery, apparatus etc. subject to mandatory safety certification as set forth in Article 34-2 (1) of the Act shall be as set forth in Table 9.

(2) Such safety certification marks and the manner of marking for any machinery, apparatus etc. that are subject to safety certification but not to mandatory safety certification as set forth in Article 34-2 (1) of the Act shall be as set forth in Table 9-2.

<Wholly amended Aug. 7, 2009>

<Renumbered from Article 58-6; former Article 58-8 renumbered as Article 58-10 <Jan. 26, 2012>>

Article 58-9 (Public Notice etc. of Revocation of Safety Certification)

(1) Upon revocation of safety certification under Article 34-3 (1) of the Act, the head of the local labor authority shall notify the Minister of Employment and Labor thereof. <Amended July 12, 2010>

(2) Upon revocation of safety certification under Article 34-3 (2) of the Act and within thirty days of such revocation, the Minister of Employment and Labor shall publish a public notice of the following matters in the official gazette, on the Internet, and in a newspaper in daily circulation registered as being in nationwide distribution in accordance with Article 12 (1) of the Act on the Freedom of Newspapers, etc. and Guarantee of Their Functions: <Amended July 12, 2010>

1. the name and type number of the applicable item of machinery, apparatus etc. subject to safety certification;
2. the safety certification number;
3. the manufacturer (or importer) and its representative;
4. the location of the workplace; and
5. the date of revocation and the reason therefor.

<Wholly amended Aug. 7, 2009>

<Renumbered from Article 58-7, <Jan. 26, 2012>>

Article 58-10 (Order to Recall and Destroy Machinery, Apparatus etc. Subject to Mandatory Safety Certification)

(1) Where a head of the local labor authority issues an order to recall and destroy under Article 34-4 (2) of the Act, such head shall prescribe and notify each person manufacturing, importing, transferring and/or leasing out the product of the reason and the time period required to act on the order. <Amended July 12, 2010>

(2) If any person who has been issued an order to recall and destroy under paragraph (1) is capable of remedying defects by replacing components of the product or otherwise addressing non-conformances to the safety certification standards, the head of the local labor authority may order such person to recall and destroy the applicable components only. <Amended July 12, 2010>

(3) If any person who has been issued an order to recall and destroy under paragraphs (1) and (2) completes such necessary measures as required by the order, such person shall notify the head of the local labor authority of the results thereof. <Amended July 12, 2010>

(4) Upon receiving a notice under paragraph (3), the head of the local labor

authority shall notify the Minister of Employment and Labor of orders issued under paragraphs (1) and (2) as well as the results of the measures as notified under paragraph (3). <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

<Renumbered from Article 58-8, <Jan. 26, 2012>>

Article 58-11 *Deleted.* <Sep. 18, 2008>

Article 59 (Standards for Staffing, Facilities and Equipment of Safety Certification Organization)

The phrase “such personnel, facilities and equipment as prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in subparagraph 2, excluding all items thereof, of Article 28 of the Decree shall refer to those as set forth in Table 9-3.

<Article added Jan. 26, 2012>

Article 59-2 (Application etc. for Designation of Safety Certification Organization)

(1) Any person intending to be designated as a safety certification organization pursuant to Article 28-3 (1) of the Decree shall file (either physically or by electronic means) with the Minister of Employment and Labor an application for designation of a safety certification organization in the form of Schedule 4 as well as the following documents as attached thereto:

1. its Articles of Incorporation (only where the applicant is a juristic person);
2. licenses (other than national technical qualifications), diplomas, career certificates, certificates of employment and other documents evidencing that the staffing standards as set forth in Table 9-3 are met;
3. specifications of facilities and equipment and other documents evidencing that the standards for facilities and equipment as set forth in Table 9-3 are met; and
4. its business plan

(2) The provisions of Articles 18 (2) through 18 (6) shall be applicable mutatis mutandis to the application for designation of a safety certification organization. For the purpose of such application, “the head of the regional employment and labor office” shall be deemed as “the Minister of Employment and Labor” ;

“safety management service provider” as “safety certification organization” ;
“Article 15-3 (2) of the Decree” as “Article 28-3 (2) of the Decree; and
“Article 15-2 (1) of the Act” as “Article 34-5 (4)” of the Act.

[<Article added Jan. 26, 2012>](#)

CHAPTER VII-2 *Deleted.* [<Sep. 18, 2008>](#)

Article 59-3 *Deleted.* [<Sep. 18, 2008>](#)

Article 59-4 *Deleted.* [<Sep. 18, 2008>](#)

Article 59-5 *Deleted.* [<Sep. 18, 2008>](#)

Article 59-6 *Deleted.* [<Sep. 18, 2008>](#)

Article 59-7 *Deleted.* [<Sep. 18, 2008>](#)

Article 59-8 *Deleted.* [<Sep. 18, 2008>](#)

Article 59-9 *Deleted.* [<Sep. 18, 2008>](#)

Article 59-10 *Deleted.* [<Sep. 18, 2008>](#)

Article 59-11 *Deleted.* [<Sep. 18, 2008>](#)

CHAPTER VIII NOTIFICATION FOR SELF-REGULATORY SAFETY CHECK[<Amended Sep. 18, 2008>](#)

Article 60 (Exemption from Notification)

The “where safety inspection or certification has been performed or obtained under such other laws as prescribed in the Ordinance of the Ministry of Employment and Labor” as set forth in Article 35 (1) 3 of the Act shall refer to any of the following cases: [<Amended July 12, 2010>](#)

1. where safety certification under Article 14 of the Quality Control and Safety Management of Industrial Products Act has been obtained;

2. where the applicable item has been certified under Article 15 of the Industrial Standardization Act has been obtained;
3. where the applicable item has been subjected to tests conducted by a testing and inspection agency under the Framework Act on National Standards; or
4. where the applicable item has been certified under the International Electrotechnical Commission System for the Certification to Standards for Electrical Equipment for Explosive Atmospheres (IECEx) Scheme.

<Wholly amended Aug. 7, 2009>

Article 61 (Method of Notification for Machinery, Apparatus etc. Subject to Self-Regulatory Safety Check)

(1) Any person required to file a notice under the provisions of Article 35 (1) of the Act shall, before releasing or importing machinery, apparatus etc. subject to self-regulatory safety check under the same provisions (hereinafter referred to as “machinery, apparatus etc. subject to self-regulatory safety confirmation”), submit (either physically or by electronic means) a notice of self-regulatory safety check in the form of Schedule 11 as well as the following document as attached thereto to an organization commissioned to provide services regarding the acceptance of notices under Article 47 (2) of the Decree (hereinafter in the Article referred to as a “notification processor”).

1. description of the products; and
2. documents evidencing that the machinery, apparatus etc. subject to self-regulatory safety check meet the standards for self-regulatory safety check.

(2) Upon receiving a notice under paragraph (1), the notification processor shall verify either of the following documents by accessing administrative information shared under Article 36 (1) of the Electronic Government Act; provided, however, that the applicant shall be required to attach photocopies of the documents as set forth in subparagraph 2 unless the applicant consents to such verification: <Amended Mar. 3, 2011>

1. for a juristic person: a certificate of corporate register entries; or
2. for a sole proprietor: a taxpayer registration certificate.

(3) Upon receiving a notice of self-regulatory safety check under paragraph (1), the notification processor shall issue to the notifying person a certificate of notification for self-regulatory safety check in the form of Schedule 11-2 within

fifteen days of such notification.

<Wholly amended Aug. 7, 2009>

Article 62 (Self-Regulatory Safety Check Marks)

Such self-regulatory safety check marks and the manner of marking for self-regulatory safety check as set forth in Article 35-2 (1) of the Act shall be as set forth in Table 9.

<Wholly amended Sep. 18, 2008>

Article 62-2 (Content etc. of Public Notice of Order Prohibiting Use of Self-Regulatory Safety Check Marks)

(1) Where the head of a local labor authority has prohibited the use of self-regulatory safety check marks under Article 35-3 (1) of the Act, such head shall notify the Minister of Employment and Labor thereof.

(2) The Minister of Employment and Labor shall publish a notice of the following matters in the official gazette or on the Internet within thirty days of the prohibition of the use of self-regulatory safety check imposed under Article 35-3 (3) of the Act:

1. the name and type number of the applicable item of machinery, apparatus etc. subject to self-regulatory safety check;
2. the self-regulatory safety check number;
3. the manufacturer (or importer);
4. the location of the workplace; and
5. the period of prohibition and the reason therefor.

<Article added Jan. 26, 2012>

Article 63 (Order to Recall and Destroy Machinery, Apparatus etc. Subject to Self-Regulatory Safety Check)

(1) Where the head of the local labor authority issues an order to collect and destroy under Article 35-4 (2) of the Act, such head shall prescribe and notify each person manufacturing, importing, transferring and/or leasing out the product of the reason and the time period required to act on the order. <Amended July 12, 2010>

(2) If any person who has been issued an order to collect and destroy under paragraph (1) is capable of remedying defects by replacing components of the

product or otherwise addressing non-conformances to the self-regulatory safety check standards, the head of the local labor authority may order such person to recall and destroy the applicable components only. [<Amended July 12, 2010>](#)

(3) If any person who has been issued an order to collect and destroy under paragraphs (1) and (2) completes such necessary measures as required by the order, such person shall notify the head of the local labor authority of the results thereof. [<Amended July 12, 2010>](#)

(4) Upon receiving a notice under paragraph (3), the head of the local labor authority shall notify the Minister of Employment and Labor of orders issued under paragraphs (1) and (2) as well as the results of the measures as notified under paragraph (3). [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 64 *Deleted.* [<July 7, 2003>](#)

Article 65 *Deleted.* [<Sep. 18, 2008>](#)

Article 65-2 *Deleted.* [<Sep. 18, 2008>](#)

Article 66 *Deleted.* [<July 7, 2003>](#)

Article 67 *Deleted.* [<Sep. 18, 2008>](#)

Article 68 *Deleted.* [<Sep. 18, 2008>](#)

Article 69 *Deleted.* [<Sep. 18, 2008>](#)

Article 70 *Deleted.* [<July 7, 2003>](#)

Article 71 *Deleted.* [<July 7, 2003>](#)

Article 72 *Deleted.* [<Aug. 28, 1999>](#)

Article 72-2

[<Former Article 72-2 renumbered as Article 77 <Sep. 18, 2008>>](#)

Article 72-3

<Former Article 72-3 renumbered as Article 77-2 <Sep. 18, 2008>>

Article 72-4

<Former Article 72-4 renumbered as Article 77-3 <Sep. 18, 2008>>

Article 72-5

<Former Article 72-5 renumbered as Article 77-4 <Sep. 18, 2008>>

CHAPTER IX SAFETY INSPECTION <Amended Sep. 18, 2008>

Article 73 (Exemption From Safety Inspection)

The phrase "if an employer has received an inspection or certification for safety under other Acts and subordinate statutes prescribed by the Ordinance of the Ministry of Employment and labor" as set forth in Article 36 (2) of the Act shall refer to any of the following cases: <Amended July 12, 2010; Mar. 3, 2011; Jan. 26, 2012>

1. where the applicable item has undergone an inspection under Article 17 (2) of the High-Pressure Gas Safety Control Act;
2. where the applicable item has undergone an inspection under Article 39 (4) of the Energy Use Rationalization Act;
3. where the applicable item has undergone an inspection under Article 65 of the Electric Utility Act;
4. where the applicable item has undergone an inspection under Articles 26 (1) 3 and 26 (1) 4 of the Harbor Act;
5. where the applicable item has undergone such inspection under Article 9 of the Mining Safety Act as required to be conducted at a certain interval following the completion of an installation or modification project for mining facilities;
6. where the applicable item has undergone an inspection under subparagraphs 1, 2 and 4 of Article 13 (1) of the Construction Machinery Management Act (only where such inspection is conducted in accordance with the safety inspection period);
7. where the applicable item has undergone an inspection under Articles 8

through 12 of the Ship Safety Act;

8. where the applicable item has undergone an inspection under Article 23-2 (1) of the Atomic Energy Act;
9. where the applicable item has undergone an in-house inspection etc. under Article 25 (1) of the Installation, Maintenance, and Safety Control of Fire-Fighting System Act; or
10. where the applicable item has undergone periodic examinations or inspections under Article 18 of the Safety Control of Dangerous Substances Act.

<Wholly amended Aug. 7, 2009>

Article 73-2 (Application etc. for Safety Inspection)

(1) Any person required to receive a safety inspection under Article 36 (1) of the Act shall file (either physically or by electronic means) with an organization commissioned to provide safety inspection services under Article 47 (2) of the Decree (hereinafter referred to as a “safety inspection organization”) an application for safety inspection in the form of Schedule 12 no later than thirty days prior to the expiry of the inspection period under Article 73-3.

(2) Upon receiving an application for safety inspection under paragraph (1), the safety inspection organization shall conduct safety inspection on each item of the applicable machinery, apparatus and equipment within thirty days.

(3) If the safety inspection verifies that the inspection standards as set forth in Article 36 (1) of the Act (hereinafter referred to as “safety inspection standards”) are met, the safety inspection organization shall issue to the applicable employer a safety inspection mark as set forth in subparagraph 1 of Table 9-3 that may be directly affixed to such harmful or hazardous machinery, apparatus and/or equipment under Article 36 (1) of the Act and Article 28-6 of the Decree as prescribed by the Presidential Decree (hereinafter referred to as “harmful or hazardous machinery etc. subject to safety inspection”). If the standards are not met, the safety inspection shall issue to the applicable employer a notice of failure to pass safety inspection in the form of Schedule 12-3, stating the reason therefor. <Amended Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

Article 73-3 (Period of Safety Inspection; Safety Inspection Mark; Marking Method)

(1) The inspection period for harmful or hazardous machinery etc. subject to safety inspection under Article 36 (9) of the Act shall be as follows: <Amended Jan. 26, 2012>

1. for cranes, lifts and gondola lifts: the first safety inspection within three years of the completion of installation at the workplace, and subsequent inspections every two years thereafter (or every six months following the first installation if used at a construction site); or
2. for other harmful or hazardous machinery etc.: the first safety inspection within three years of the completion of installation at the workplace, and subsequent inspections every two years thereafter (or every four years for any pressure vessel that has been verified by submitting a process safety report).

(2) the safety inspection mark and the method of marking under Article 36 (9) of the Act shall be set forth in Table 9-4. <Amended Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

Article 73-4 (Standards for Staffing, Facilities and Equipment of Safety Inspection Organization)

The phrase “such personnel, facilities and equipment as prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in subparagraph 2, excluding all items thereof, of Article 28-2 of the Decree, which is applicable mutatis mutandis pursuant to Article 28-7 of the Decree shall refer to those as set forth in Table 9-5.

<Article added Jan. 26, 2012>

Article 73-5 (Application etc. for Designation of Safety Inspection Organization)

(1) Any person intending to be designated as a safety inspection organization pursuant to Article 28-7 of the Decree shall file (either physically or by electronic means) with the Minister of Employment and Labor an application for designation of a safety inspection organization in the form of Schedule 4 as well as the following documents as attached thereto:

1. its Articles of Incorporation (only where the applicant is a juristic person);
2. licenses (other than national technical qualifications), diplomas, career certificates, certificates of employment and other documents evidencing that

the staffing standards as set forth in Table 9–5 are met;

3. specifications of facilities and equipment and other documents evidencing that the standards for facilities and equipment as set forth in Table 9–5 are met; and
4. its business plan.

(2) The provisions of Articles 18 (2) through 18 (6) shall be applicable mutatis mutandis to the application for designation of a safety inspection organization. For the purpose of such application, “the head of the regional employment and labor office” shall be deemed as “the Minister of Employment and Labor” ; “safety management service provider” as “safety inspection organization” ; “Article 15–3 (2) of the Decree” as “Article 28–7 of the Decree; and “Article 15–2 (1) of the Act” as “Article 36–10 of the Act.”

<Article added Jan. 26, 2012>

Article 74 (Qualifications of Inspector)

The phrase “person who has the qualifications and experience prescribed by the Ordinance of the Ministry of Employment and Labor” and “person who has completed the training prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in subparagraphs 1 and 2 of Article 36–2 (2) of the Act (each of such person hereinafter referred to as an “inspector”) shall refer to any of the following persons: <Amended July 12, 2010>

1. any person who has acquired engineer qualifications or higher in the field of mechanical, electrical, electronic, chemical, or occupational safety engineering under the National Technical Qualifications Act and has practiced for three years or more in the applicable field;
2. any person who has acquired industrial engineer qualifications or higher in the field of mechanical, electrical, electronic, chemical, or occupational safety engineering under the National Technical Qualifications Act and has practiced for five years or more in the applicable field;
3. any person who has acquired craftsman qualifications or higher in the field of mechanical, electrical, electronic, chemical, or occupational safety engineering under the National Technical Qualifications Act and has practiced for seven years or more in the applicable field;
4. any person who has graduated from a four–year school under the Higher Education Act (or any other school deemed equivalent to or surpassing such

- school in terms of academic qualifications under the same Act or other laws) with a major in or closely related to mechanical, electrical, electronic, chemical, or occupational safety engineering and practiced for three years or more in the applicable field;
5. any person who has graduated from a school under the Higher Education Act other than as set forth in subparagraph 4 (or any other school deemed equivalent to or surpassing such school in terms of academic qualifications under the same Act or other laws) with a major in or closely related to mechanical, electrical, electronic, chemical, or occupational safety engineering and practiced for five years or more in the applicable field;
 6. any person who has graduated from a high school or trade high school under the Elementary and Secondary Education Act with a major in or closely related to mechanical, electrical, electronic, or chemical engineering and practiced for seven years or more in the applicable field; or
 7. any person who has completed an inspector training course under Article 43 and practices for one year or more in the applicable field.

<Wholly amended Aug. 7, 2009>

Article 74-2 (Recognition etc. of Voluntary Inspection Program)

(1) In order to gain recognition of a voluntary inspection program under Article 36-2 (1) of the Act, the Employer shall satisfy all of the following requirements; provided, however, that if an inspection organization under Article 36-2 (3) of the Act (hereinafter referred to as a “designated inspection organization”) has been retained, the requirements as set forth in subparagraphs 1 and 2 shall be deemed to have been satisfied: <Amended July 12, 2010; Jan. 26, 2012>

1. Inspectors under Article 74 shall be employed.
2. The employer shall have and be capable of maintaining inspection equipment as prescribed and published by the Minister of Employment and Labor.
3. An inspection shall be conducted each period equivalent to half of the inspection period under Article 73-3 (or each six months for any crane under Article 28-6 (1) 3 of the Decree that is not used at a construction site).
4. The inspection standards as incorporated in the voluntary inspection program shall satisfy safety inspection standards.

(2) Any person intending to gain recognition of a voluntary inspection program

pursuant to Article 36-2 (1) of the Decree shall file with the Agency an application for recognition of a voluntary inspection program in the form of Schedule 13 as well as two copies of a document describing the program including the following information as attached thereto: <Amended Jan. 26, 2012>

1. a breakdown of such harmful or hazardous machinery etc. subject to safety inspection as maintained by such person;
2. a list of inspectors under Article 74, inspection equipment, and methods of maintaining such equipment (or documents evidencing that a designated inspection organization has been retained if such is the case);
3. the inspection period and standards for harmful or hazardous machinery etc.;
4. an inspection plan for harmful or hazardous machinery etc. subject to safety inspection for subsequent two years; and
5. records of implementation of the voluntary inspection program for the last two years (in the case of a reapplication only).

(3) Upon receiving an application for recognition of a voluntary inspection program under paragraph (2), the Agency shall verify either of the following documents by accessing administrative information shared under Article 36 (2) of the Electronic Government Act; provided, however, that the applicant shall be required to attach photocopies of the documents as set forth in subparagraph 2 unless the applicant consents to such verification: <Amended Mar. 3, 2011; Jan. 26, 2012>

1. for a juristic person: a certificate of corporate register entries; or
2. for a sole proprietor: a taxpayer registration certificate.

(4) Upon receiving documents on a voluntary inspection program under paragraph (2), the Agency shall determine whether to recognize the program within fifteen days. <Amended Jan. 26, 2012>

(5) If the Agency recognizes the voluntary inspection program as applied for, the Agency shall issue to the applicant a certificate of recognition of the voluntary inspection program in the form of Schedule 13-2 as well as one copy of the voluntary inspection program description with a certifying seal affixed thereto. <Amended Jan. 26, 2012>

(6) If the Agency does not recognize the voluntary inspection program as applied for, the Agency shall issue to the applicant a notice of non-conformance of the voluntary inspection program in the form of Schedule 13-3, stating the reason therefor. <Amended Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

Article 75 (Requirements for Designation of Designated Inspection Organization)

The designation of a designated inspection organization shall require the personnel, facilities and equipment as set forth in Table 10.

<Wholly amended July 1, 2009>

Article 76 (Application etc. for Designation of Designated Inspection Organization)

(1) Any person intending to be designated as a designated inspection organization shall file (either physically or by electronic means) with the head of the competent regional employment and labor office exercising jurisdiction over the organization an application for designation of a designated inspection organization in the form of Schedule 4 as well as the following documents as attached thereto: <Amended July 12, 2010; Mar. 3, 2011>

1. its Articles of Incorporation;
2. licenses (other than national technical qualifications), diplomas, career certificates, certificates of employment and other documents evidencing the qualifications and employment of the persons meeting the staffing standards as set forth in Table 10;
3. photocopies of building lease agreements or any other documents and facility and equipment specifications evidencing that an office is maintained; and
4. a business plan for the first one year.

(2) Upon receiving an application under paragraph (1), the head of the local labor authority shall verify the certificate of corporate register entries and national technical qualifications by accessing administrative information shared under Article 36 (1) of the Electronic Government Act, and require the applicant to attach photocopies of national technical qualifications to the application unless the applicant consents to such verification. <Amended Mar. 3, 2011>

(3) The provisions of Articles 18 (3) through 18 (6) shall be applicable mutatis mutandis to, inter alia, the review for designation of inspection organizations, the issuance and reissuance of certificates of designation, the modification of designation, and the return of certificates of designation.

(4) Upon receiving an application for designation under paragraph (1) or an

application for modification of design under paragraph (3), the head of the local labor authority shall consult in advance with the heads of other local labor authorities exercising jurisdiction over the areas in which the inspection organization provides services. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 76-2 (Standards for Services Provided by Designated Inspection Organization)

(1) If an inspection leads to the discovery of any facts failing to meet safety inspection standards, the designated inspection organization under Article 76 shall notify the applicable employer of specific opinions on necessary remedies.

(2) The designated inspection organization shall record and maintain the description of the inspection for each machine or apparatus, results of examinations, measures taken, and other results of the inspection.

<Wholly amended Aug. 7, 2009>

Article 77 (Requirements for Registration and Support for Manufacturing of Machinery, Apparatus etc. Subject to Mandatory Safety Certification)

The phrase “the requirements prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 36 (2) of the Act shall refer to the requirements as set forth in Table 10-2. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

<Heading amended Jan. 26, 2012>

Article 77-2 (Application for Registration etc.)

(1) Any person intending to obtain registration under Article 36-3 (2) of the Act shall file (either physically or by electronic means) with an organization commissioned to provide registration and support services for the manufacturers of machinery, apparatus etc. subject to mandatory safety certification under Article 47 (2) of the Decree (hereinafter referred to as a “registration and support service provider”) an application for registration in the form of Schedule 13-4 as well as the following documents as attached thereto: <Amended Mar. 3, 2011; Jan. 26, 2012>

1. licenses (other than national technical qualifications), diplomas, career certificates, certificates of employment and other documents evidencing the

qualifications and employment of the persons meeting the staffing standards as set forth in Table 10–2;

2. photocopies of building lease agreements or any other documents and facility and equipment specifications evidencing that an office is maintained; and
3. documents on the manufacturing personnel, facilities used to produce and assemble major components and finished products, and the operation of the in-house quality system (with the exception of manufacturers of local exhaust systems, general ventilation systems, and noise and vibration control equipment).

(2) Upon receiving an application for registration under paragraph (1), the registration and support service provider shall verify either of the following documents by accessing administrative information shared under Article 36 (2) of the Electronic Government Act; provided, however, that the applicant shall be required to attach photocopies of the documents as set forth in subparagraph 2 unless the applicant consents to such verification: [<Amended Mar. 3, 2011>](#)

1. for a juristic person: a certificate of corporate register entries; or
2. for a sole proprietor: a taxpayer registration certificate.

(3) Upon receiving an application for registration under paragraph (1), the registration and support service provider shall verify whether such application meets the standards as set forth in Table 10–2 and then issue to the applicant a certificate of registration in the form of Schedule 13–5 within thirty days of receipt of such application.

(4) If any person having completed registration under paragraph (3) intends to make modifications with respect to the registration, the applicant shall submit to registration and support service provider an application for modification in the form of Schedule 13–4 as well as its certificate of registration and documents evidencing such modifications. In which case, paragraph (3) shall be applicable mutatis mutandis with respect to the processing of the application for modification.

[<Wholly amended Aug. 7, 2009>](#)

Article 77–3 (Details of Support etc.)

(1) A registration and support service provider may provide the following support for a person registered under Article 36–3 (2) of the Act: [<Amended July 12, 2010; Jan. 26, 2012>](#)

1. technical support for design, installation, research, development and testing;
2. full or partial subsidization of the cost of design, installation, research, development and testing;
3. full or partial subsidization of the cost of purchasing testing equipment to be used for research and development and/or quality control purposes;
4. full or partial subsidization of the cost of holding domestic or overseas exhibitions;
5. the support for the priority use of industrial property owned by the Agency; and/or
6. any other support for such operations as deemed by the Minister of Employment and Labor necessary to enhance the manufacturing, design and installation capabilities of a registrant.

(2) Any person intending to receive support under paragraph (1) shall submit to a registration and support service provider an application for support, stating, inter alia, details of the support sought after. [<Amended Jan. 26, 2012>](#)

(3) Upon receipt of an application for support under paragraph (2), the registration and support service provider shall review and determine, inter alia, whether to provide support, the scope of support, and support priorities and notify the applicant thereof within thirty days; provided, however, that in the case of an application for support under paragraph (1) 2, the review period may be extended by up to fifteen days if any unavoidable circumstances prevent the service provider from completing the review and determination within thirty days. [<Amended Jan. 26, 2012>](#)

(4) The registration and support service provider shall follow up on each person who has been registered or provided support. [<Added Jan. 26, 2012>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 77-4 (Revocation of Registration etc.)

(1) If the registration and support service provider has verified any facts falling within the scope of events warranting revocation under Article 36-3 (3) of the Act, the service provider shall submit to the head of the local labor authority exercising jurisdiction over the applicable registrant a report thereon as well as documents evidencing such facts as attached thereto. [<Amended July 12, 2010>](#)

(2) Where the head of the local labor authority restricts support under Article 36-3 (3) 2 of the Act, such restriction shall be imposed for a prescribed period

of one year or less. <Added Jan. 26, 2012>

(3) Where the head of the local labor authority has revoked a registration under Article 36-3 (3) of the Act, such head shall notify the registration and support service provider thereof. <Amended July 12, 2010; Jan. 26, 2012>

(4) Any person whose registration has been revoked under Article 36-3 (3) of the Act shall immediately return its certificate of registration under Article 77-2 (3) to the registration and support service provider. <Added Jan. 26, 2012>

(5) Where the Minister of Employment and Labor obtains restitution of subsidy funds or an amount equivalent to support pursuant to Article 36-3 (4), the Minister shall notify the supported person, specifying the payment due date and the amount of repayment. In such case, the payment due date shall be within one month of the date of notification for repayment. <Added Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

CHAPTER X PROHIBITION AND PERMISSION OF MANUFACTURING ETC. OF HARMFUL SUBSTANCES; CLASSIFICATION ETC. <Amended Oct. 7, 2005>

SECTION 1 Prohibition and Permission of Manufacturing etc. <Amended Oct. 7, 2005>

Article 78 (Application for Approval etc. for Use of Substances Prohibited from Being Manufactured)

(1) Any person intending to obtain approval for manufacturing, importation and/or use of any substances prohibited from being manufactured as set forth in subparagraphs of Article 29 of the Decree pursuant to Article 37 (2) of the Act shall file with the head of the competent local labor authority an application in the form of Schedule 14 and the following documents as attached thereto: <Amended July 12, 2010>

1. testing and research plans (which shall contain matters concerning, inter alia, the purpose and volume of manufacturing, importation and/or use);
2. documents on, inter alia, the names, structure and performance of the facilities and devices to be used to take occupational safety and health measures; and
3. an overall process flow diagram for the applicable laboratory (or workplace), and documents on the types and volumes of the substances to be handled in

each process and the number of workers engaged in each process.

(2) Upon receiving an application for approval for manufacturing, importation and/or use, the head of the local labor authority shall review the following matters and either issue to the applicant a written approval in the form of Schedule 15 or notify the applicant of its disapproval within twenty days of such receipt; provided, however, that an approval for importation may only be issued where an approval for use has been or is being issued: <Amended July 12, 2010; Mar. 3, 2011; July 6, 2011>

1. whether the content of the application and attachments under paragraph (1) is adequate;
2. whether the equipment etc. to be used in the manufacturing or use of the substances are in compliance with the provisions of Articles 33 and 499 through 511 of the Safety and Health Regulations; and
3. whether the substances to be imported are identical to the substances for which the approval for use has been issued, whether the volume as set forth in the approval for use is exceeded; and whether the substances are otherwise consistent with the approval for use (applicable only in the case of approval for use).

(3) The provisions of Articles 18 (4) and 18 (6) shall be applicable mutatis mutandis to the reissuance or return of any approval for manufacturing, importation and/or use of any substances prohibited from being manufactured.

<Wholly amended Aug. 7, 2009>

Article 79 (Application for Permit for Manufacturing etc.; Review of Application)

(1) Any person intending to obtain permit for manufacturing or use of any harmful substances as set forth in subparagraphs of Article 30 of the Decree pursuant to Article 38 (1) of the Act and Article 30-2 of the Decree shall file with the head of the competent local labor authority an application for permit for manufacturing or use in the form of Schedule 16 and the following documents as attached thereto: <Amended July 12, 2010>

1. its business plan (which shall contain matters concerning, inter alia, the purpose and volume of manufacturing, importation and/or use);
2. documents on, inter alia, the names, structure and performance of the facilities and devices to be used to take occupational safety and health measures; and

3. an overall process flow diagram for the applicable workplace, and documents on the types and volumes of the substances to be handled in each process and the number of workers engaged in each process.

(2) Upon receiving an application for permit for manufacturing and/or use under paragraph (1), the head of the local labor authority shall review the following matters and either issue to the applicant a written permit in the form of Schedule 17 or notify the applicant of its disapproval within twenty days of such receipt: [〈Amended July 12, 2010; Mar. 3, 2011; July 6, 2011〉](#)

1. whether the content of the application and attachments under paragraph (1) is adequate; and
2. whether the equipment etc. to be used in the manufacturing or use of the substances are in compliance with the provisions of Articles 33, 35 (1) (applicable only in the case as set forth in paragraphs (16) and (17) of Table 2 of the Safety and Health Regulations), and 453 through 486 of the Safety and Health Regulations.

(3) Where necessary to review an application for permit for manufacturing or use under paragraph (2), the head of the local labor authority may request the Agency to review the application and attachments. [〈Amended July 12, 2010〉](#)

(4) Upon receipt of a request under paragraph (3), the Agency shall notify the head of the local labor authority of its findings within ten days of such request. [〈Amended July 12, 2010〉](#)

(5) The provisions of Articles 18 (4) and 18 (6) shall be applicable mutatis mutandis to the reissuance and return of any manufacturing and use permits for harmful substances.

[〈Wholly amended Aug. 7, 2009〉](#)

Article 80 (Revocation etc. of Approval)

(1) If the equipment etc. to be used in the manufacturing or use of the substances of any person who has obtained approval under Article 78 or its work methods become incompliant with approval standards, the Minister of Employment and Labor may revoke the approval. [〈Amended July 12, 2010〉](#)

(2) If the head of a local labor authority has ordered the revocation of a permit or the suspension of operation pursuant to Article 38 (5) of the Act, such head shall notify the governor of special self-governing province, the mayor or head of Gun or Gu (autonomous Gu; hereinafter the same shall apply) exercising

jurisdiction over the applicable workplace thereof. <Amended July 12, 2010>
<Wholly amended Aug. 7, 2009>

SECTION 1-2 Asbestos Survey etc. <Added Aug. 7, 2009>

Article 80-2 (Omission etc. of Asbestos Survey; Verification Procedures)

(1) If the owner et al. of buildings or equipment intends to obtain verification of buildings etc. for which the asbestos survey may be omitted under any subparagraph of Article 30-3 (2) of the Decree pursuant to the provision of Article 38-2 (2) of the Act, such owner et al. shall submit to the head of the competent local labor authority an application for verification of asbestos survey etc. to be omitted in the form of Schedule 17-3, indicating that no asbestos is contained or that more than one percent (by weight) of asbestos is contained, as well as a written verification of such fact by an asbestos surveyor as attached thereto. <Amended July 12, 2010; Jan. 26, 2012>

(2) If the owner et al. of buildings or equipment has had an asbestos survey as set forth in the Asbestos Safety Management Act performed pursuant to Article 38-2 (3) of the Act, such owner et al. shall submit to the head of the competent local labor authority an application for verification of asbestos investigation etc. to be omitted in the form of Schedule 17-3, indicating that an asbestos survey as set forth in the Asbestos Safety Management Act has been performed, as well as a statement of the results of such asbestos survey as attached thereto. <Amended Jan. 26, 2012>

(3) Upon receiving an application set forth in paragraphs (1) and (2), the head of the local labor authority shall review the application and notify the applicant of the results within twenty days of such receipt. <Amended July 12, 2010; Jan. 26, 2012>

(4) In order to verify the content of an application under paragraph (3), the head of the local labor authority may request the Agency to review the application with respect to its technical details. <Amended July 12, 2010>

<Article added Aug. 7, 2009>

<Heading amended Jan. 26, 2012>

Article 80-3 (Requirements for Designation of Asbestos Investigator etc.)

(1) The standards for the staffing, facilities and equipment under Article 30-4

(2) of the Decree shall be as set forth in Table 10-3.

(2) Any person intending to be designated as an asbestos surveyor pursuant to Article 30-5 (1) of the Decree shall file with the head of the competent local labor authority an application for designation of an asbestos surveyor in the form of Schedule 4 as well as the following documents as attached thereto: [<Amended July 12, 2010; Mar. 3, 2011>](#)

1. its Articles of Incorporation;
2. any document that may be submitted in lieu of the Articles of Incorporation (only where the applicant is not a juristic person);
3. any document that may be submitted in lieu of a certificate of corporate register entries (only where the applicant is not a juristic person);
4. licenses (other than national technical qualifications), career certificates, certificates of employment and other documents evidencing the qualifications and employment of the persons meeting the staffing standards as set forth in Table 10-3;
5. photocopies of building lease agreements or any other documents and facility and equipment specifications evidencing that an office is maintained; and
6. such recognition of its capability to perform asbestos surveys as issued within the last one year.

(3) Upon receiving an application as set forth in paragraph (2), the head of the competent local labor authority shall verify the certificate of corporate register entries (only where the applicant is a juristic person) and national technical qualifications by accessing administrative information shared under Article 36 (1) of the Electronic Government Act, and require the applicant to attach photocopies of national technical qualifications to the application unless the applicant consents to such verification. [<Amended Mar. 3, 2011>](#)

(4) The provisions of Articles 18 (3) through 18 (6) shall be applicable mutatis mutandis to, inter alia, the issuance of certificates of designation of asbestos surveyors, the modification of designation, and the return of certificates of designation.

[<Article added Aug. 7, 2009>](#)

Article 80-4 (Methods of Asbestos Survey etc.)

(1) The methods of asbestos surveys under Article 38 (2) of the Act shall be as follows: [<Amended Jan. 26, 2012>](#)

1. A preliminary survey on whether asbestos is contained shall be performed using, inter alia, building drawings, equipment fabrication drawings and/or the tracing of materials used.
2. The materials etc. of the buildings or equipment to be dismantled or removed shall be separated into parts having different properties and being in different state.
3. Samples shall be retrieved in different numbers taking into account the size of each part separated under item 2.

(2) If only one solid sample is retrieved from any part separated under paragraph (1) 2, taking into account its size, and analyzed, then the content of asbestos in the applicable part shall be determined based on such one sample. If two or more solid samples are retrieved and analyzed, then the content of asbestos in the applicable part shall be determined based on the sample having the highest content of asbestos.

(3) The Minister of Employment and Labor shall prescribe and publish specific matters concerning the methods of surveys under paragraph (1) and determination under paragraph (2), the number of samples to be retrieved by size, the preparation of an asbestos survey report, and any other necessary matters. <Amended July 12, 2010>

<Article added Aug. 7, 2009>

Article 80-5 (Standards for Staffing, Facilities and Equipment of Asbestos Disposal and Removal Service Provider)

The standards for the staffing, facilities and equipment of an asbestos disposal and removal service provider under Article 30-8 (2) of the Decree shall be as set forth in Table 10-4.

<Article added Aug. 7, 2009>

Article 80-6 (Application for Registration etc. of Asbestos Disposal and Removal Service Provider)

(1) Any person intending to be registered as an asbestos disposal and removal service provider pursuant to Article 30-9 (1) of the Decree shall file with the head of the local labor authority exercising jurisdiction over its principle place of business an application for registration of an asbestos disposal and removal service provider in the form of Schedule 17-4 as well as the following

documents as attached thereto: [<Amended July 12, 2010>](#)

1. documents evidencing the qualifications and employment of the persons meeting the staffing standards as set forth in Table 10-5; and
2. photocopies of building lease agreements or any other documents and facility and equipment specifications evidencing that an office is maintained.

(2) Upon receiving an application for registration of an asbestos disposal and removal service provider under paragraph (1), the head of the local labor authority shall issue to the applicant a certificate of registration of an asbestos disposal and removal service provider in the form of Schedule 17-5 within twenty one days of receipt of such application if such application meets the standards as set forth in Table 10-4. [<Amended July 12, 2010>](#)

(3) The provisions of Articles 18 (4) through 18 (6) shall be applicable mutatis mutandis to, inter alia, the reissuance of certificates of registration of asbestos disposal and removal service providers, the modification of designation, and the return of certificates of designation.

[<Article added Aug. 7, 2009>](#)

Article 80-7 (Procedure for Notification for Asbestos Disposal and Removal Work etc.)

(1) No later than seven days prior to any asbestos disposal and removal work, the asbestos disposal and removal service provider under Article 38-4 (1) of the Act shall prepare and submit to the head of the local labor authority exercising jurisdiction over the site of the asbestos disposal and removal work a statement of asbestos disposal and removal work in the form of Schedule 17-6 in accordance with paragraph (3) of the same Article. [<Amended July 12, 2010>](#)

(2) If the statement of asbestos disposal and removal work as submitted under paragraph (1) has been modified, a modified statement of asbestos disposal and removal work in the form of Schedule 17-7 shall be promptly submitted to the head of the local labor authority exercising jurisdiction over the site of the asbestos disposal and removal work. [<Amended July 12, 2010>](#)

(3) Upon receiving a statement of asbestos disposal and removal work under paragraph (1) or a modified statement under paragraph (2), the head of the local labor authority shall issue to the applicant a certificate of (modified) statement of asbestos disposal and removal work in the form of Article 17-8 within seven days of receipt of such statement if it is verified that the statement and

attachments are adequate in content. <Amended July 12, 2010>

(4) The head of the local labor authority may order a statement to be supplemented if the verification under paragraph (3) results in the statement being found to be inconsistent with facts; if any attachments have been omitted; or if such supplement is otherwise deemed necessary. <Amended July 12, 2010>

(5) If the head of a local labor authority has received a statement of asbestos disposal and removal work under paragraph (1) or a modified statement under paragraph (2), the Minister of Employment and Labor may notify the applicable mayor or head of Gun or Gu thereof by electronic means. <Added Mar. 3, 2011>

<Article added Aug. 7, 2009>

Article 80-8 (Evaluation of Safety Assessment for Asbestos Disposal and Removal Work etc.)

(1) The safety assessment criteria for asbestos disposal and removal work under Article 38-4 (4) are as follows:

1. whether the standards for asbestos disposal and removal work are met;
2. the performance of equipment; and
3. the level of training and skills development of its personnel, the level of computerization, and any other necessary matters.

(2) The Minister of Employment and Labor shall prescribe and publish necessary matters concerning, inter alia, assessment items, assessment grades, assessment methods and methods of publishing for the asbestos disposal and removal work safety assessment. <Amended July 12, 2010>

<Article added Aug. 7, 2009>

Article 80-9 (Standards for Asbestos Concentration upon Completion of Asbestos Disposal and Removal Work)

The phrase “the standard prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 38-5 (1) of the Act shall refer to 0.01 asbestos body per 1 cm³. <Amended July 12, 2010>

<Article added Aug. 7, 2009>

Article 80-10 (Qualifications for Person Eligible to Measure Asbestos Concentration)

The phrase “person eligible to measure asbestos concentration in air” as set

forth in Article 38-5 (2) of the Act shall refer to any person having any of the following set of qualifications:

1. any person having the qualifications for an industrial engineer of industrial hygiene management or air pollution control environmental or higher as employed by an asbestos surveyor under Article 38-2 (2) of the Act; or
2. any person having the qualifications for an industrial engineer of industrial hygiene management or higher as employed by a designated monitoring service provider under Article 42-2 (4) of the Act.

<Article added Aug. 7, 2009>

Article 80-11 (Methods for Measuring Asbestos Concentration)

(1) The methods for measuring asbestos concentration under Article 38-5 (2) of the Act shall be as follows:

1. Measurements shall be obtained in dry air after verifying the completion of work at the site of asbestos disposal and removal.
2. Measurements shall be obtained after dispersing dust deposits in the work site.
3. Measurements shall be obtained using the area sampling method, in which particulates in air are sampled by fixing a sampler at a spot where work has been performed.

(2) The Minister of Employment and Labor shall prescribe and publish necessary matters concerning, inter alia, specifics of the measurement method under paragraph (1), the number of samples, and the method of analysis. <Amended July 12, 2010>

<Article added Aug. 7, 2009>

Article 80-12 (Submission of Asbestos Concentration Measurements)

In accordance with Article 38-5 (1) of the Act, upon completion of asbestos disposal and removal work, the asbestos disposal and removal service provider shall promptly submit (either physically or by electronic means) to the head of the competent local labor authority an asbestos concentration measurement report in the form of safety 17-9 as well as an asbestos concentration measurement sheet prepared by the applicable monitoring service provider in the form of Schedule 17-10 as attached thereto as an evidentiary material regarding the compliance with the asbestos concentration standards. <Amended July 12, 2010>

<Article added Aug. 7, 2009>

SECTION 2 Classification, Control etc. of Harmful Agents

<Amended Oct. 7, 2005>

Article 81 (Classification and Control of Harmful Agents)

(1) The phrase “classification standards prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 39 (1) of the Act shall refer to the standards as set forth in Table 11-2. <Amended July 12, 2010>

(2) The Minister of Employment and Labor shall control the harmful agents falling within the scope of the classification standards under paragraph (1) by designating such agents as the following substances or agents, depending on the results of surveys under paragraph (3) and hazard and risk assessments under Article 39 (3) of the Act: <Amended July 12, 2010; Mar. 3, 2011; July 6, 2011>

1. substances the manufacturing etc. of which are prohibited under Article 37 of the Act;
2. substances the manufacturing etc. of which are permitted under Article 38 of the Act;
3. harmful agents for which occupational exposure limits are required to be set under Article 39 (2) of the Act (hereinafter referred to as “OELs”);
4. harmful agents for which permissible exposure limits (hereinafter referred to as “PELs”) are required to be set under Article 39-2 (1) of the Act;
5. harmful agents subject to work environment monitoring under Article 93 (1); or
6. harmful substances to be controlled under Article 420 (1) of the Safety and Health Regulations.

(3) In order to obtain such data as may be necessary to control harmful agents in accordance with paragraph (2), the Minister of Employment and Labor may periodically survey, inter alia, the levels of harmful agent handling and exposure, the number of workers handling harmful agents, and harmful agent handling processes (hereinafter referred to as a “harmful agent exposure survey”).

<Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 81-2 (Setting of Occupational Exposure Limits)

Where setting OELs for harmful agents for which OELs are required to be set,

the Minister of Employment and Labor shall take into account the following:
[<Amended July 12, 2010>](#)

1. results of researches and fact-finding surveys on health problems resulting from the applicable harmful agent;
2. results of hazard and risk assessments of the applicable harmful agent; and
3. technical feasibility of the application of OELs for the applicable harmful agent.

[<Wholly amended Aug. 7, 2009>](#)

Article 81-3 (Criteria for Selection etc. of Hazard and risk assessment Targets)

(1) The criteria for the selection of harmful agents as hazard and risk assessment targets under Article 39 (3) of the Act shall be as follows:

1. harmful agents requiring hazard and risk assessments so that they may be classified into the categories as set forth in subparagraphs of Article 81 (2);
2. harmful agents suspected of resulting in mutagenicity, inhalation toxicity, reproductive toxicity, carcinogenicity, and other health problems of workers when they are exposed; or
3. harmful agents that have created public sensation or otherwise required hazard and risk assessments.

(2) The Minister of Employment and Labor shall conduct hazard and risk assessments on such harmful agents as selected under paragraph (1) in accordance with such hazard and risk testing standards as prescribed by the Minister of Employment and Labor. [<Amended July 12, 2010>](#)

(3) Where deemed necessary to conduct assessments adequate to the hazard and risk testing standards under paragraph (2), the Minister of Employment and Labor may designate a hazard and risk testing agency to conduct hazard and risk assessment for and on behalf of the Minister. [<Amended July 12, 2010>](#)

(4) The Minister of Employment and Labor shall prescribe matters necessary for, inter alia, the designation of a hazard and risk testing agency under paragraph (3). [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 81-4 (Permissible Exposure Limits)

(1) The phrase "PELs" as prescribed by the Ordinance of the Ministry of Employment and Labor" as set forth in the main clause of Article 39-2 (1),

excluding all subparagraphs thereof, of the Act shall refer to the limits as set forth in Table 11–3. <Amended July 12, 2010>

(2) The provisions of Article 93–3 shall be applicable *mutatis mutandis* to the measuring of levels of exposure to the harmful agents for which PELs are required to be set.

<Wholly amended Aug. 7, 2009>

Article 82 (Temporary Work and Brief Work)

The phrase “temporary work and brief work as prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 39–2 (1) 3 of the Act shall refer to temporary work under subparagraph 8 of Article 420 of the Safety and Health Regulations and brief work under subparagraph 9 of the same Article, where the “harmful substances to be controlled” shall be deemed “harmful substances for which PELs are required to be set” . <Amended July 12, 2010; Mar. 3, 2011; July 6, 2011>

<Wholly amended Aug. 7, 2009>

CHAPTER XI HAZARD AND RISK ASSESSMENTS ON CHEMICALS

<Amended Aug. 7, 2009>

Article 83 *Deleted.* <Nov. 23, 1995>

Article 84 *Deleted.* <Nov. 23, 1995>

Article 85 *Deleted.* <Mar. 21, 1992>

Article 86 Submission of Hazard and Risk Assessment Reports)

(1) Pursuant to Article 40 (1), any person intending to manufacture or import a new chemical substance (or any other person importing the substance for and on behalf of such person) shall submit to the Minister of Employment and Labor a hazard and risk assessment report in the form of Schedule 18 as well as safety and health materials on the applicable new chemical substance, toxicity test reports, documents on the method of manufacturing, use and handling, process flow diagrams for manufacturing or use, and other relevant documents as attached thereto no later than forty five days prior to the date of planned manufacturing

or import; provided, however, that the hazard and risk assessment report may be submitted to the Minister of Environment such hazard and risk assessment report if such chemical substance falls within the scope of the hazard review under Article 10 of the Toxic Chemicals Control Act. <Amended July 12, 2010; Jan. 26, 2012>

(2) Upon receiving a hazard and risk assessment report under the proviso of paragraph (1), the Minister of Environment shall forward to the Minister of Employment and Labor such hazard and risk assessment report and results of a hazard review under the Toxic Chemicals Control Act. <Amended July 12, 2010>

(3) Where the Minister of Employment and Labor has reviewed a hazard and risk assessment report under paragraph (1) and thus intends to order that necessary measures be taken under Article 40 (4) of the Act, the Minister shall prepare a notice of measures against harm and hazard in the form of Schedule 18-2 and provide the notice for the person having submitted the applicable hazard and risk assessment report; provided, however, that where the Minister has reviewed such relevant documents forwarded by the Minister of Environment under paragraph (2) and thus intends to order that necessary measures be taken under Article 40 (4) of the Act, the Minister of Employment and Labor shall prepare a notice of measures against harm and hazard and forward the notice to the Minister of Environment. <Amended July 12, 2010>

(4) Upon receiving a notice of measures against harm and hazard forwarded by the Minister of Employment and Labor under the proviso of paragraph (3), the Minister of Employment shall forward such notice to the applicable employer. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 87 *Deleted.* <Nov. 23, 1995>

Article 87-2 *Deleted.* <Nov. 23, 1995>

Article 88 (Exclusion of Public Consumer Goods from Hazard and Risk Assessments)

(1) The phrase “cases prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 40 (1) 1 of the Act shall refer to any of the following cases as verified by the Minister of Employment and

Labor: [<Amended July 12, 2010>](#)

1. where the new chemical substance is a finished product and not further processed within the country;
2. where the packaging or container of the new chemical substance is not modified within the country or the new chemical substance is not packed or placed in containers within the country; or
3. where the new chemical substance is directly provided for consumers and not used in domestic workplaces.

(2) Any person intending to obtain verification under paragraph (1) shall file with the Minister of Employment and Labor an application in the form of Schedule 1 and documents evidencing facts falling within the scope of any subparagraph of paragraph (1) as attached thereto no later than seven days prior to the intended date of importation. [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 89 (Exclusion of Small Quantity Substances from Hazard and Risk Assessments)

(1) The case where the hazard and risk assessment report on any new chemical substance is not submitted as it is imported in a small quantity pursuant to Article 40 (1) 2 of the Act shall refer to the case where the annual volume of the new chemical substance imported is less than 100 kg as verified by the Minister of Employment and Labor. [<Amended July 12, 2010>](#)

(2) If any person who has obtained verification under paragraph (1) has imported or intends to import the new chemical substance in a quantity equal to exceeding the quantity as set forth in the same paragraph, such person shall submit to the Minister of Employment and Labor a hazard and risk assessment report under Article 86 within thirty days of the occurrence of such event. [<Amended July 12, 2010>](#)

(3) The provisions of Article 88 (2) shall be applicable mutatis mutandis to an application for verification under paragraph (1).

(4) The verification under paragraph (1) shall remain valid for a period of one year.

[<Wholly amended Aug. 7, 2009>](#)

Article 89-2 (Other Exclusions from Hazard and Risk Assessments)

(1) The phrase “cases prescribed by the Ordinance of the Ministry of Employment and Labor, where the level of harm and hazard is deemed to be low” as set forth in Article 40 (1) 2 of the Act shall refer to any of the following cases as verified by the Minister of Employment and Labor: <Amended July 12, 2010; Jan. 26, 2012>

1. where the new chemical substance to be manufactured or imported will be used for testing and/or research purposes;
2. where the new chemical substance is manufactured or imported in an annual quantity of 10 tons or less in order to export the whole quantity; or
3. where the substance is such macromolecular compound consisting of chemicals that are not new chemicals as prescribed and published by the Minister of Employment and Labor.

(2) The provisions of Article 88 (2) shall be applicable mutatis mutandis to an application for verification under paragraph (1).

<Wholly amended Aug. 7, 2009>

Article 89-3 (Exemption from Verification)

If any person required to obtain verification under Article 88, 89 or 89-2 is provided by the Minister of Environment a verification that such person is exempted from the hazard review under Article 12 of the Toxic Chemicals Control Act, such person shall be deemed to have obtained verification under Article 88, 89 or 89-2.

<Wholly amended Sep. 25, 2006>

Article 90 (Verification and Notification)

Upon receiving an application as set forth in Article 88, 89 or 89-2, the Minister of Employment and Labor shall promptly conduct a verification and notify the applicant of the results within twenty days of such receipt. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 91 (Publication of Names etc. of New Chemicals)

(1) Upon receiving a hazard and risk assessment report under Article 86, the Minister of Employment and Labor shall promptly review the report and publish a public notice of, inter alia, the name, levels of hazard and risk, and measures for

the new chemical substance in the official gazette, and/or in a newspaper in daily circulation registered as being in nationwide distribution in accordance with Article 12 (1) of the Act on the Freedom of Newspapers, etc. and Guarantee of Their Functions and notify ministries and agencies concerned thereof; provided, however, that if the employer has requested the protection of information on the new chemical substance such as its name, CAS number, structural formula and molecular formula, the Minister may evaluate the warrantability of such protection and publish the product name etc. instead. <Amended July 12, 2010>

(2) The Minister of Employment and Labor shall prescribe and publish necessary matters concerning, inter alia, the criteria for assessing the warrantability of the protection of information under the proviso of paragraph (1). <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 92 (Consultation etc.)

In reviewing a hazard and risk assessment report filed under Article 86, the Minister of Employment and Labor may refer to the results of the hazard review on the applicable substance performed by the Minister of Environment or consult with the Agency or other relevant experts. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 92-2 (Method of Preparation of Material Safety Data Sheets)

(1) If any person transferring or providing target chemicals as set forth in Article 41 (1) of the Act (hereinafter referred to as “target chemicals”) prepared material safety data sheets as set forth in Article 41 (1) of the Act, such person shall cite the source of quoted information to ensure the reliability of such material safety data sheets. <Amended Jan. 26, 2012>

(2) The Minister of Employment and Labor shall prescribe and publish the methods of detailing material safety data sheets, terms of art, and other matters necessary therefor. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

<Renumbered from Article 92-3; former Article 92-3 renumbered as Article 92-4 <Jan. 26, 2012>>

<Heading amended Jan. 26, 2012>

Article 92-3 (Method of Provision of Material Safety Data Sheets)

(1) If a material safety data sheet is provided under Article 41 (1) of the Act, the material safety data sheet shall be provided together with the applicable chemical substance or otherwise as prescribed and published by the Minister of Employment and Labor.

(2) If the same target chemical substance is repeatedly transferred or provided to the same transferee on two or more consecutive occasions, the transferor may elect not to provide further copies of the material safety data sheet unless the data sheet for the applicable target chemical has been modified, except where the transferee requests the provision of the material safety data sheet.

[<Article added Jan. 26, 2012>](#)

[<Former Article 92-3 renumbered as Article 92-2 <Jan. 26, 2012>>](#)

Article 92-4 (Statements in Material Safety Data Sheets; Method of Posting, Making Available etc.)

(1) The phrase “matters prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 41 (1) 4 of the Act shall refer to the following: [<Amended July 12, 2010>](#)

1. physical and chemical properties;
2. toxicity information;
3. measures to take in the event of explosion or fire;
4. instructions for emergency care; and
5. any other matters as prescribed by the Minister of Employment and Labor.

(2) The information that the transferor may elect not to state in the material safety data sheet under Article 41 (2) of the Act shall be such statements on ingredients and their content under Article 41 (1) 1 as deemed to fall within the scope of trade secrets under subparagraph 2 of Article 2 of the Unfair Competition Prevention and Trade Secret Protection Act. In which case, the person transferring or providing the target chemical substance shall clarify in the material safety data sheet that such information is trade secrets. [<Amended Jan. 26, 2012>](#)

(3) The phrase “method prescribed by the Ordinance of the Ministry of Employment and Labor” shall refer to any of the following methods: [<Added Jan. 26, 2012>](#)

1. The material safety data sheet for each target chemical substance shall be

constantly posted or made available at a place readily visible to or accessibly by the workers handling such target chemical.

2. Computing equipment that allows workers handling the target chemical to readily access material safety data sheets shall be in place.

<Wholly amended Aug. 7, 2009>

<Renumbered from Article 92-2; former Article 92-4 renumbered as Article 92-5 <Jan. 26, 2012>>

<Heading amended Jan. 26, 2012>

Article 92-5 (Warning Indications and Statements)

(1) If any person transferring or providing target chemicals or any employer handling target chemicals places warning indications under Articles 41 (4) and 41 (5) of the Act, such person or employer shall affix or print warning indications to or on the container or packaging containing the target chemical or otherwise ensure that hazard and risk information is made clear; provided, however, that a warning label shall be deemed to have been placed if any of the following indications are made: <Amended Jan. 26, 2012>

1. indication of toxic materials under Article 29 of the Toxic Chemicals Control Act;
2. indication regarding the container of dangerous substances under Article 20 (1) of the Safety Control of Dangerous Substances Act;
3. markings on containers etc. under Article 11-2 of the High-Pressure Gas Safety Control Act;
4. indication under Articles 6 (1) and 26 (1) of the Regulations on Ship Transportation and Storage of Dangerous Goods (the indication on imported goods as prescribed and published by the Minister of Land, Transport and Maritime Affairs under Article 26 (1) of the same Regulations shall be applicable only up to the point of checking in at the workplace where such goods are used for the first time); or
5. indication provided in accordance with such technical standards for the air transportation of dangerous goods as prescribed by the International Civil Aviation Organization under Article 188 of the Enforcement Regulations of the Aviation Act (the indication on imported goods shall be applicable only up to the point of checking in at the workplace where such goods are used for the first time).

(2) warning indications under the main clause of paragraph (1), excluding all subparagraphs thereof, shall contain all of the following: <Amended Jan. 26, 2012>

1. name: the name of the applicable target chemical substance;
2. pictogram: a picture indicating hazard and danger according to the category of the chemical substance;
3. signal word: text message of “Danger” or “Warning” as stated according to the level of hazard or danger;
4. harms and hazards statements: text messages indicating harms and hazards according to the hazard classification of the chemical substance;
5. precautionary statements: notes stated to prevent harms and hazards resulting from the exposure to or improper storage or handling of chemicals; and
6. supplier information: names and telephone numbers of the manufacturer and/or supplier of the target chemicals.

(3) The Minister of Employment and Labor shall prescribe and publish necessary matters concerning, inter alia, the dimensions of warning indications as well as the method of placement of pictograms, signal words, harms and hazards statements, precautionary statements, and other indications. <Amended July 12, 2010>

(4) The phrase “cases prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in the proviso of Article 41 (5) of the Act shall refer to any of the following cases: <Added Jan. 26, 2012>

1. where any person transferring or providing target chemicals under Article 41 (4) of the Act has already placed warning indications on the container containing target chemicals; or
2. where a worker temporarily uses a container to move target chemicals out of a container on which warning indications are placed.

<Wholly amended Aug. 7, 2009>

<Renumbered from Article 92-4; former Article 92-5 renumbered as Article 92-6 <Jan. 26, 2012>>

<Heading amended Jan. 26, 2012>

Article 92-6 (Time, Content, Method etc. of Training on Material Safety Data Sheets)

(1) Pursuant to Article 41 (7), the employer shall provide workers with training on those statements in material safety data sheets of target chemical handled at

the workplace that fall within the scope of Table 8-2 in any of the following cases, where the trained workers shall be deemed to have been provided with the safety and health training under Article 31 of the Act for the applicable hours: <Amended Jan. 26, 2012>

1. where workers are assigned to any work involving the manufacturing, use, transport or storage of target chemical;
2. where new target chemicals have been introduced; or
3. where hazard and risk information have been modified.

(2) Where the training under paragraph (1) is provided, the employer may classify target chemicals into categories having similar classification of hazard and risk. <Amended Jan. 26, 2012>

(3) Upon providing training under paragraph (1), the employer shall keep and maintain records of training hours, training content etc.

<Wholly amended Aug. 7, 2009>

<Renumbered from Article 92-5; former Article 92-6 renumbered as Article 92-8 <Jan. 26, 2012>>

<Heading amended Jan. 26, 2012>

Article 92-7 (Posting of Control Instructions by Work Process)

(1) The control instructions by work process under Article 41 (9) of the Act shall contain the following: <Amended Jan. 26, 2012>

1. name of target chemicals;
2. hazard and risk;
3. precautions to be taken in handling;
4. appropriate personal protective equipment; and
5. instructions for emergency care and measures in the event of accidents.

(2) In preparing control instructions by work process, the statements in material safety data sheets under Article 41 (1) of the Act shall be referred to. <Amended Jan. 26, 2012>

(3) Control instructions by work process may be prepared and posted for each category having similar classification of hazard and risk. <Added Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

Article 92-8 (Submission and Modification of Material Safety Data Sheets)

(1) Pursuant to Article 41 (8) of the Act, the head of the local labor authority

may order any person transferring or providing target chemicals or any employer handling target chemicals to submit material safety data sheets in any of the following cases: <Amended July 12, 2010; Jan. 26, 2012>

1. where the content of the material safety data sheets circulated, posted or made available is deemed to have abnormalities;
2. where the material safety data sheets cover target chemicals materially affecting the safety and health of workers; or
3. where such submission is necessary to protect the safety and health of workers from accidents, occupational diseases caused by target chemicals or any other material accidents.

(2) Upon receiving material safety data sheets under paragraph (1), the head of the local labor authority may request the Agency to review such sheets. If it is necessary to modify material safety data sheet, such head shall, within thirty days of such receipt, order the person transferring or providing target chemicals or the employer handling target chemicals to make modification, specifying what modifications to be made. <Amended July 12, 2010; Jan. 26, 2012>

(3) Upon being ordered to modify material safety data sheet under Article 41 (8) of the Act, the person transferring or providing target chemicals or the employer handling target chemicals shall notify the head of the local labor authority of the results of modification within thirty days of the issuance of the order. <Amended July 12, 2010; Jan. 26, 2012>

(4) If any person having modified material safety data sheet in accordance with the order issued under paragraph (2) had previously transferred or provided the applicable target chemicals, such person shall provide modified material safety data sheet again. <Added Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

<Renumbered from Article 92-6; former Article 92-8 renumbered as Article 92-9 <Jan. 26, 2012>>

Article 92-9 (Provision of Materials Relevant to Material Safety Data Sheets)

(1) The Minister of Employment and Labor may cause the Agency to provide workers and the employer with materials relevant to the preparation of material safety data sheets pursuant to Article 41 (10) of the Act. <Amended July 12, 2010; Jan. 26, 2012>

(2) Where deemed necessary to provide workers and the employer with

materials relevant to the preparation of material safety data sheets, the Minister of Employment and Labor or the Agency may request the materials related to material safety data sheets to the person transferring or providing target chemicals. <Amended July 12, 2010; Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

<Renumbered from Article 92-8; former Article 92-9 renumbered as Article 92-10 <Jan. 26, 2012>>

<Heading amended Jan. 26, 2012>

PART V HEALTHCARE FOR WORKERS

Article 92-10 (Request for Information Not Stated in Material Safety Data Sheets)

The phrase “the occurrence of serious health problems to workers or such other cases as prescribed in the Ordinance of the Ministry of Employment and Labor” as set forth in the former part of Article 41 (11) of the Act shall refer to any of the following cases: <Amended July 12, 2010; Jan. 26, 2012>

1. where a health manager under Article 16 of the Act (or a health management service provider under Article 16 (3) of the Act) determines that target chemicals may cause occupational diseases or any other serious health problems to workers;
2. where a physician or occupational physician deems the provision of information is necessary to provide medical treatment for workers;
3. where target chemicals has caused occupational diseases or other serious health problems to occur to workers, resulting in the applicable workers or the worker representative determining that it is necessary to request for information.

<Wholly amended Aug. 7, 2009>

<Renumbered from Article 92-9 <Jan. 26, 2012>>

CHAPTER I WORKING ENVIRONMENT MONITORING

Article 93 (Workplaces Subject to Work Environment Monitoring etc.)

- (1) The phrase “workplaces prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 42 (1) of the Act shall refer to

any workplace where there are workers exposed to the harmful agents subject to work environment monitoring as set forth in Table 11-4; provided, however, that work environment monitoring may be omitted in any of the following cases: <Amended July 12, 2010; Mar. 3, 2011; July 6, 2011>

1. any workplace where temporary work under subparagraph 8 of Article 420 of the Safety and Health Regulations or brief work under subparagraph 9 of the same Article is performed (excluding any work handling carcinogenic substances);
2. any workplace where the permissible consumption of harmful substances to be controlled under Article 420 (1) of the Safety and Health Regulations is not exceeded (applicable exclusively to work environment monitoring regarding such harmful substances to be controlled);
3. any workplace where dust generating work is performed as set forth in subparagraph 2 of Article 605 of the Safety and Health Regulations, which is excluded from the application of the applicable Chapter (with respect to work environment monitoring of dust only); or
4. any other such workplace where the levels of exposure to the harmful agents subject to work environment monitoring are significantly lower than OELs as prescribed and published by the Minister of Employment and Labor.

(2) Where a safety or health surveyor has, in connection with a health survey, monitored the work environment for all harmful agents in the workplace under paragraph (1) using such methods as prescribed by the Minister of Employment and Labor, the employer may elect not to conduct work environment monitoring for the applicable workplace that would otherwise be required to be performed under Article 42 of the Act. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 93-2 (Qualifications for Work Environment Monitors)

The phrase “person having the qualifications prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 42 (1) of the Act shall refer to any person having the qualifications for an industrial engineer or higher specializing in industrial hygiene management as employed by the workplace. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 93-3 (Methods of Work Environment Monitoring)

(1) In conducting work environment monitoring under Article 42 (1) of the Act, the employer shall comply with the following:

1. A preliminary survey shall be conducted before conducting work environment monitoring.
2. Monitoring shall be conducted when work is being normally performed and working hours and the level of exposure of workers to harmful agents may be accurately assessed.
3. All measurements shall be taken using the personal sampling method; provided, however, that if it is impractical to use the personal sampling method, the area sampling method shall be used (in which case, the reason shall be clearly stated in the work environment monitoring sheet in the form of Schedule 21).

(2) Other than the monitoring methods as set forth in paragraph (1), the Minister of Employment and Labor shall prescribe necessary matters concerning, inter alia, details of measuring each harmful agent. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 93-4 (Number of Measurements to Take)

(1) In the event that a new workplace or a new work process comes in operation or is modified and thereby becomes a workplace subject to work environment monitoring under Article 93 (1), the employer shall conduct work environment monitoring within thirty days of such event, and periodically conduct work environment monitoring once or more per six-month period; provided, however, that for any workplace or work process for which work environment monitoring produced any of the following results, work environment monitoring shall be conducted for the applicable harmful agents once or more per three-month period, starting from the date of such monitoring:

1. where the measurement for any chemical agent falling within the scope of subparagraph 1 of Table 11-4 (only where such agent is a carcinogenic substance) exceeds the OEL; or
2. where the measurement for any chemical agent falling within the scope of subparagraph 1 of Table 11-4 (excluding carcinogenic substances) exceeds twice or more of the OEL.

(2) Notwithstanding paragraph (1), if changes in work process equipment or

work methods, relocation of equipment, changes in chemicals used or any other changes affecting the results of work environment monitoring have occurred within the last one year, the employer may conduct work environment monitoring for the applicable harmful agents only once or more per year in any of the following cases, with the exception of any work process handling carcinogenic substances:

1. where work environment monitoring has resulted in noise level measurements of less than 85 dB for the work process for the last two consecutive occasions; or
2. where work environment monitoring has resulted in measurements of all agents other than noise being less than PELs for the last two consecutive occasions.

<Wholly amended Aug. 7, 2009>

Article 94 (Reporting of Work Environment Monitoring Measurements)

(1) Upon conducting work environment monitoring in accordance with Article 42 (1) of the Act, the employer shall submit to the head of the local labor authority a work environment monitoring report in the form of Schedule 20 as well as a work environment monitoring sheet in the form of Schedule 21 as attached thereto within thirty days of the completion of sampling under Article 93-3 (1) 3; provided, however, that the thirty-day period may be extended by up to additional thirty days if the employer of a workplace where significant time required to analyze and assess samples makes it difficult to file the report within the initial thirty days of the completion of sampling submits to the head of the local labor authority documentary evidence of such fact as prescribed by the Minister of Employment and Labor. <Amended July 12, 2010>

(2) If a designated monitoring service provider has conducted work environment monitoring pursuant to Article 42 (5) of the Act, a work environment monitoring sheet shall be submitted by electronic means to the head of the local labor authority within thirty days of the completion of sampling; provided, however, that the thirty-day period may be extended by up to additional thirty days if significant time required to analyze and assess samples makes it difficult for the designated monitoring service provider to file the report within the initial thirty days of the completion of sampling and such service provider submits to the head of the local labor authority documentary evidence of such fact as prescribed by

the Minister of Employment and Labor. [<Amended July 12, 2010>](#)

(3) If work environment monitoring leads to the discovery of any work process for which OELs have been exceeded, the employer shall install or remedy the applicable facilities or equipment or take any other appropriate measures pursuant to Article 42 (3) of the Act and submit to the head of the competent local labor authority a remedial plan or documents evidencing that the applicable work process has been remedied within sixty days of the completion of sampling under Article 93-3 (1) 3. [<Amended July 12, 2010>](#)

(4) The Minister of Employment and Labor shall prescribe and publish necessary matters concerning the content of the report on work environment monitoring under paragraphs (1) and (2), and the methods and procedures therefor. [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 95 (Standards for Staffing, Facilities and Equipment of Designated Monitoring service Provider)

The standards for the staffing, facilities and equipment of a designated monitoring service provider under Article 32-4 (3) of the Decree shall be as set forth in Table 12.

[<Wholly amended Aug. 7, 2009>](#)

Article 96 (Procedures for Designation of Designated Monitoring service Providers)

(1) Any person intending to be designated as a designated monitoring service provider pursuant to Article 32-5 (1) of the Decree shall file, with the head of the competent local labor authority exercising jurisdiction over the area in which work environment monitoring will be performed, an application for designation of a designated monitoring service provider in the form of Schedule 4 as well as the following documents as attached thereto; provided, however, that if such person is a sub-organization of a workplace, such person shall submit the same to the head of the local labor authority exercising jurisdiction over such workplace. [<Amended July 12, 2010; Mar. 3, 2011>](#)

1. its Articles of Incorporation;
2. any document that may be submitted in lieu of the Articles of Incorporation (only where the applicant is not a juristic person);

3. any document that may be submitted in lieu of a certificate of corporate register entries (only where the applicant is not a juristic person);
4. licenses (other than national technical qualifications), career certificates, certificates of employment and other documents evidencing the qualifications and employment of the persons meeting the staffing standards as set forth in Table 12;
5. photocopies of building lease agreements or any other documents and facility and equipment specifications evidencing that an office is maintained; and
6. a work environment monitoring business plan for the first one year (or the list of target workplaces and a photocopy of the final work environment monitoring report if such person is a sub-organization of a workplace).

(2) Upon receiving an application under paragraph (1), the head of the local labor authority shall verify the certificate of corporate register entries (only where the applicant is a juristic person) and national technical qualifications by accessing administrative information shared under Article 36 (1) of the Electronic Government Act, and require the applicant to attach photocopies of national technical qualifications to the application unless the applicant consents to such verification. [<Amended Mar. 3, 2011>](#)

(3) The provisions of Articles 18 (3) through 18 (6) shall be applicable mutatis mutandis to, inter alia, the issuance of certificates of designation to designated monitoring service providers, the modification of designation, and the return of certificates of designation.

(4) The Minister of Employment and Labor shall prescribe and publish the number of designated monitoring service providers, their areas of coverage and any other necessary matters. [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 97 (Designation etc. of Designated Monitoring service Providers)

(1) The criteria for such assessment of the levels of work environment monitoring services of a designated monitoring service provider as to be conducted by the Minister of Land, Transport and Maritime Affairs shall be as follows: [<Amended July 12, 2010>](#)

1. the capability of conducting work environment monitoring and analyzing samples;
2. the level of reliability of measurements;

3. the performance of facilities and equipment; and
4. the level of training and skills development of its personnel, the level of computerization, and any other necessary matters.

(2) The Minister of Employment and Labor shall prescribe and publish necessary matters concerning the methods for assessing designated monitoring service providers, the method of publication etc. [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 97-2 *Deleted.* [<July 7, 2003>](#)

Article 97-3 (Designation of Harmful Agent- or Line of Business-Specific Work Environment Research Organizations)

(1) Where deemed necessary to protect the health of worker from harmful agents in workplaces and promote research on work environment management methods, the Minister of Employment and Labor may designate harmful agent- or line of business-specific work environment research organizations and provide necessary support within budgetary constraints. [<Amended July 12, 2010>](#)

(2) The Minister of Employment and Labor shall prescribe necessary matters concerning, inter alia, the criteria for designation of harmful agent- or line of business-specific work environment research organizations under paragraph (1).

[<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 97-4 (Subjects of Assessment of Reliability in Work Environment Monitoring etc.)

(1) Pursuant to Article 42-3 of the Act, the head of a local labor authority may conduct an assessment of reliability in work environment monitoring (hereinafter referred to as a “reliability assessment”) as set forth in Article 42-2 of the Act in any of the following cases as prescribed and published by the Minister of Employment and Labor: [<Amended July 12, 2010>](#)

1. where workers with occupational diseases have been found despite work environment monitoring measurements being less than OELs;
2. where the levels of exposure to harmful agents have significantly changed despite the lack of changes in process equipment, work methods, or chemicals used or any other changes in work conditions; or

3. where it is deemed necessary to conduct a reliability assessment due to, inter alia, any work environment monitoring performed in violation of work environment monitoring methods under Article 93–3.

(2) If the head of a local labor authority intends to conduct a reliability assessment, such head shall review the work environment monitoring report under Article 42 (1) of the Act and documents on work environment monitoring under Article 64 (4) of the Act and then conduct work environment monitoring on the applicable work process or workplace. <Amended July 12, 2010; Jan. 26, 2012>

(3) if the work environment monitoring under paragraph (2) leads to the discovery that OELs have been exceeded, the head of the local labor authority shall cause the employer to install or remedy the applicable facilities or equipment or take any other appropriate measures pursuant to Article 42 (3) of the Act. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

CHAPTER II MEDICAL EXAMINATIONS OF WORKERS

Article 98 (Definitions)

For the purpose of this Chapter, the following terms shall have the following meanings ascribed to them: <Amended July 12, 2010>

1. The phrase “general medical examination” shall mean the medical examination periodically arranged by the employer pursuant to Article 43 (1) of the Act to manage the health of workers employed on an ongoing basis.
2. The phrase “special medical examination” shall mean the medical examination arranged by the employer pursuant to Article 43 (1) of the Act to manage the health of the following workers:
 - a. any workers engaged in such activities entailing exposure to the harmful agents requiring special medical examinations as set forth in Table 12–2 (hereinafter referred to as “activities requiring special medical examinations”); and
 - b. any worker found to have occupational disease in medical examinations who has subsequently switched to other work or been relocated to another workplace and found by a physician to require medical examinations for the harmful agents that have caused the occupational

disease finding.

3. The term “pre-assignment medical examination” shall mean the medical examination, as arranged by the employer, of workers to be engaged in the activities requiring special medical examinations as arranged by the employer in order to assess their adequacy for said activities.
4. The term “occasional medical examination” shall mean the medical examination, as arranged by the employer, of workers who exhibit symptoms suspected of occupational asthma, occupational dermatitis or any other health problems or have medical findings in response to harmful agents resulting from activities requiring special medical examinations.
5. The term “tentative medical examination” shall mean the medical examination arranged by the employer in accordance with an order issued by the head of the local labor authority under Article 43 (2) in order to verify, inter alia, the existence of poisoning resulting from any harmful agents requiring special medical examinations or any other harmful agents, whether workers have contracted diseases, and/or the cause of diseases in any of the following cases:
 - a. where workers serving in the same section or exposed to the same harmful agent have subjective and/or objective symptoms of similar diseases;
 - b. where any worker with medical findings suggesting occupational disease have appeared or a number of such workers may appear; or
 - c. where such examinations are otherwise deemed necessary by the head of the local labor authority.

<Wholly amended Aug. 7, 2009>

Article 98-2 (Types of Medical Examinations)

- (1) The employer shall arrange general medical examinations, special medical examinations, pre-assignment medical examinations, pre-assignment medical examinations, occasional medical examinations, and tentative medical examinations in accordance with the frequency and subjects of medical examinations under Article 43 of the Act.
- (2) The employer shall make active efforts to facilitate medical examinations of workers, and workers shall extend full cooperation for the medical examinations and measures arranged by the employer.

<Wholly amended Aug. 7, 2009>

Article 98-3 (Provider of Medical Examinations etc.)

(1) The employer shall arrange special, pre-assignment and occasional medical examinations under Article 98 as provided by a health care provider designated by the head of the local labor authority (hereinafter referred to as a “special medical examination provider”). <Amended July 12, 2010>

(2) The employer shall arrange general medical examinations as provided by a special medical examination provider or an organization providing medical examination services under the National Health Insurance Act (hereinafter referred to as a “medical examination provider”).

<Wholly amended Aug. 7, 2009>

Article 99 (Frequency etc. of Medical Examinations etc.)

(1) The employer shall arrange medical examinations for the workers who are employed on an ongoing basis and hold office positions (which shall refer to the workers who are engaged in general affairs, human resources, accounting, sales, design and other clerical activities at offices that are not situated in such areas as factories or construction sites, and exclude those who are engaged in front line sales activities) once or more per two-year period and for other workers who are employed on an ongoing basis once or more per year; provided, however, that if the employer has arranged any of the following types of medical examinations, any workers who have received such medical examinations shall be deemed to have received general medical examinations under these Regulations:

1. medical examinations under the National Health Insurance Act;
2. physical examinations under the Aviation Act;
3. medical examinations under the School Health Act;
4. periodical medical examinations under the Act on the Prevention of Pneumoconiosis and Protection, etc. of Workers Suffering from Pneumoconiosis;
5. medical examinations under the Seafarers Act; or
6. any other medical examinations covering all test items of general medical examinations as set forth in Article 100 (1).

(2) For any workers who are engaged in activities requiring special medical examinations, the employer shall arrange special medical examinations at such

frequency as prescribed for each harmful agent requiring special medical examinations in Table 12-3; provided, however, that if the employer has arranged any of the following types of medical examinations, any workers who have received such medical examinations shall be deemed to have received special medical examinations for the applicable harmful agents under these Regulations:

1. medical examinations under the Atomic Energy Act (radiology examinations only);
2. periodical medical examinations under the Act on the Prevention of Pneumoconiosis and Protection, etc. of Workers Suffering from Pneumoconiosis (for mineral dust only);
3. medical examinations under the Regulations on the Safety Management of Diagnostic Radiation Generators (radiology examinations only); or
4. any other medical examinations covering all test items of special medical examinations as set forth in Table 13.

(3) For any workers falling within the scope of subparagraph 2 b of Article 98, the employer shall arrange special medical examinations at such point in time as deemed necessary by the physician who has diagnosed the workers with respect to the harmful agents resulting in medical findings suggesting occupational disease.

(4) If the employer intends to assign workers to activities requiring special medical examinations, the employer shall arrange a pre-assignment medical examination prior to such assignment and provide, in advance, the special medical examination provider with information on, inter alia, the activities to be assumed by the applicable workers, and harmful agents requiring special medical examinations that exist at the applicable workplace; provided, however, that the employer may elect not to arrange a pre-assignment medical examination in any of the following cases:

1. for any workers who have received any of the following medical examinations for the applicable harmful agents at other workplaces within the last six months and submitted documents stating the results of such examinations (hereinafter referred to as "individual medical examination sheets") or photocopies thereof:
 - a. pre-assignment medical examinations;
 - b. special, occasional or tentative medical examinations covering all primary

- test items of pre-assignment medical examinations; or
- c. medical examinations covering the primary and secondary test items of pre-assignment medical examinations; or
- 2. for any workers who have received any of such medical examinations for the applicable harmful agents as set forth in items of subparagraph 1 at the applicable workplace within the last six months.
- (5) If any workers engaged in activities requiring special medical examinations exhibit symptoms suspected of occupational asthma, occupational dermatitis or any other health problems or have medical findings in response to harmful agents covered by special medical examinations, the employer shall arrange a occasional medical examination as prescribed by the Minister of Employment and Labor in order to ensure prompt health management for the applicable workers. <Amended July 12, 2010>
- (6) In any of the cases as set forth in the proviso of paragraph (1), excluding all subparagraphs thereof, or in the proviso of paragraph (2), excluding all subparagraphs thereof, or in the event where medical examinations for the same items have been provided under other laws, examinations under these Regulations may be omitted with respect to the applicable items only.

<Wholly amended Aug. 7, 2009>

Article 99-2 (Temporary Reduction of Medical Examination Periods)

Notwithstanding Article 99 (2), with respect to any of the following workers, the employer shall reduce the special medical examination period for each of the applicable harmful agents to one-half thereof for the next examination only, depending on the results of work environment monitoring under Article 42 (1) of the Act or the results of special medical examinations:

1. all workers exposed to the applicable harmful agents in any work process where OELs are exceeded as discovered in work environment monitoring;
2. all workers exposed to the applicable harmful agents in any work process where medical findings suggesting occupational disease have been discovered in a special, occasional or tentative medical examination; and
3. any workers covered by a physician's decision that the special medical examination period should be reduced for the applicable harmful agents as a result of a special or occasional medical examination.

<Wholly amended Aug. 7, 2009>

Article 99-3 *Deleted.* <Nov. 23, 1995>

Article 99-4 (Specification of When to Provide Medical Examinations)

Any employer required to arrange general or special medical examinations under Articles 99 (1) and 99 (2) shall clearly specify when to provide medical examinations in the safety and health management regulations or the staff regulations and/or otherwise make efforts to ensure that general or special medical examinations are provided on a regular basis.

<Wholly amended Aug. 7, 2009>

Article 100 (Test items and Methods)

(1) The primary test items of a general medical examination are as follows:

1. patient history, work history, and subjective and objective symptoms (visual inspection, palpation, auscultation, and history taking);
2. blood pressure, blood glucose, urine glucose, urine protein level tests and anemia tests;
3. body weight, eyesight and hearing;
4. indirect chest radiography; and
5. serum GOT and GPT, gamma GPT and total cholesterol.

(2) The blood glucose level test, total cholesterol test and gamma GPT test as specified as the primary test items under paragraph (1) shall be performed on such workers as prescribed by the Minister of Employment and Labor. <Amended July 12, 2010>

(3) A secondary medical examination is required if the examination under paragraph (1) does not allow positive diagnosis of disease. The scope, test items, methods and time for the secondary medical examination shall be prescribed and published by the Minister of Employment and Labor. <Amended July 12, 2010>

(4) The test items of special, pre-assignment, and occasional medical examinations shall be classified into primary and secondary items as detailed in Table 13.

(5) The primary test items under paragraph (4) shall be applicable to all workers who are subject to special, pre-assignment, and occasional medical examinations.

(6) The secondary tests under paragraph (4) shall be performed as prescribed by the Minister of Employment and Labor on all persons for whom it is difficult

to assess the health level with the primary tests alone or the primary tests indicate that disease is suspected. In which case, where deemed necessary the physician taking into account the level of exposure, patient history etc., all or part of secondary tests may be performed in addition to and at the time of primary tests. [<Amended July 12, 2010>](#)

(7) The test items of tentative medical examinations shall be all or part of test items of small and medium enterprises as set forth in Table 13 as well as such items as deemed necessary by the physician in charge of the medical examination.

(8) The Minister of Employment and Labor shall prescribe test methods and other matters necessary for medical examinations. [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 101 (Cost of Medical Examinations)

The cost of medical examinations under Article 43 (8) of the Act shall be in accordance with the standards as set forth in the National Health Insurance Act.

[<Wholly amended Aug. 7, 2009>](#)

Article 102 (Requirements for Special Medical Examination Providers)

The requirements for designation of a special medical examination provider shall be: any health care provider under the Medical Services Act who meets the staffing, facilities and equipment requirements as set forth in Table 14.

[<Amended Oct. 16, 1997; Aug. 28, 1999; June 30, 2005; Sep. 18, 2008>](#)

[<Heading amended Aug. 28, 1999>](#)

Article 103 (Application etc. for Designation of Special Medical Examination Providers)

(1) Any person intending to be designated as a special medical examination provider pursuant to Article 102 shall file with the head of the competent local labor authority an application for designation of a special medical examination provider in the form of Schedule 4 (including any electronic application) as well as the following documents (including any electronic documents) as attached thereto, which attachments, however, may be replaced by the use of administrative information shared under Article 36 (1) of the Electronic Government Act if such use verifies the following documents: [<Amended July 12,](#)

2010; Mar. 3, 2011>

1. licenses, career certificates, certificates of employment and other documents evidencing the qualifications and employment of the persons meeting the staffing standards as set forth in Table 14;
2. photocopies of building lease agreements or any other documents and facility and equipment specifications evidencing that an office is maintained;
3. a business plan for medical examination services for the first one year; and
4. documents evidencing that medical examination provider's capability to provide medical examination and analysis services is duly recognized under Article 43 (9) of the Act within the last one year (or an agreement on the analysis of biological exposure indicators, if any, as executed with a medical examination provider whose provide medical examination and analysis services is duly recognized).

(2) Where the head of a local labor authority receives an application under paragraph (1) and designates a special medical examination provider, such head shall ensure that the annual number of special medical examinees per physician shall not exceed ten thousand. <Amended July 12, 2010>

(3) The provisions of Articles 18 (3) through 18 (6) shall be applicable mutatis mutandis to, inter alia, the issuance of certificates of designation to special medical examination providers, the modification of designation, and the return of certificates of designation.

(4) The Minister of Employment and Labor shall prescribe and publish the method of designation of special medical examination providers, their areas of coverage, and any other matters necessary for the designation and administration of special medical examination providers. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 103-2 *Deleted.* <Sep. 25, 2006>

Article 103-3 (Designation of Harmful Agent-Specific Medical Examination Research Organizations)

(1) Where deemed necessary to promote research on harmful agents in workplaces, the Minister of Employment and Labor may designate harmful agent-specific medical examination research organizations and provide necessary support within budgetary constraints. <Amended July 12, 2010>

(2) The Minister of Employment and Labor may cause the Agency to perform, inter alia, the support activities under paragraph (1) for and on behalf of the Minister. <Amended July 12, 2010>

(3) The Minister of Employment and Labor shall prescribe necessary matters concerning, inter alia, the criteria for designation of harmful agent-specific medical examination research organizations. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 104 *Deleted.* <Sep. 28, 2000>

Article 105 (Reporting etc. of Medical Examination Results)

(1) If a medical examination provider has conducted a medical examination, the provider shall record its results in such individual medical examination sheets as prescribed by the Minister of Employment and Labor and forward the sheets to workers within thirty days of the examination. <Amended July 12, 2010>

(2) If any medical findings suggesting disease have been discovered in a medical examination, the medical examination provider shall explain to the applicable worker medical findings, matters necessary for follow-up measures, and whether the worker is fit to perform the activities (only in the case of a special medical examination provider) within thirty days of the examination, except where such explanation has been provided to a health manager who is a physician of the workplace employing the applicable worker.

(3) The medical examination provider shall forward any of the following medical examination sheets to the employer within thirty days of any medical examination:

1. for a general medical examination: a general medical examination sheet in the form of Table 22 (1); or
2. for a special, pre-assignment, or occasional medical examination: a special, pre-assignment, or occasional medical examination in the form of Table 22 (2).

(4) If the medical examination sheet under paragraph (3) indicates that it is necessary to maintain the health of a worker, the employer shall take measures as set forth in Article 43 (5) of the Act and provide the worker with a description of such measures.

(5) If a special, occasional or tentative medical examination of workers has been

conducted, the special medical examination provider shall submit medical examination sheets to the head of the local labor authority within thirty days of such examination in accordance with Article 43 (4), except where electronic data of individual medical examination sheets have been forwarded to the Agency as prescribed by the Minister of Employment and Labor. <Amended July 12, 2010>

(6) Where deemed necessary to maintain the health of workers, the head of the local labor authority may require the applicable employer to submit general medical examination sheets in the form of Table 22 (1). <Amended July 12, 2010>
<Wholly amended Aug. 7, 2009>

Article 105-2 (Follow-Up Measures etc. for Medical Examination Results)

The Minister of Employment and Labor may prescribe and publish such matters as may be necessary for the employer to take measures under Article 105 (4).
<Article added Jan. 26, 2012>

Article 106 (Assessment etc. of Special Medical Examination Providers)

(1) The criteria for the assessment of special medical examination providers conducted by the Minister of Employment and Labor under Article 43 (1) of the Act are as follows: <Amended July 12, 2010>

1. the capability of conducting medical examinations and analyzing results thereof;
2. the level of reliability in the medical examination results and findings;
3. the performance of facilities and equipment; and
4. the level of training and skills development of its personnel, the level of computerization, and any other necessary matters.

(2) The Minister of Employment and Labor shall prescribe and publish necessary matters concerning the methods for assessing special medical examination providers, the method of publication etc. <Amended July 12, 2010>

<Article added Aug. 7, 2009>

Article 107 (Retention of Medical Examination Results)

Pursuant to the proviso of Article 64 (1) of the Act and Article 144 (1) of these Regulations, the employer shall retain the medical examination sheets forwarded under Article 105 (3) and such documents evidencing results of medical examinations as submitted by workers under the proviso of Article 43 (3) of the Act (or electronic data of such documents, if any) for five-year periods;

provided, however, that documents or electronic data on medical examination results for any workers handling such substances verified to be carcinogenic as published by the Minister of Employment and Labor shall be retained for thirty-year periods. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 107-2 (Subjects, Procedures etc. of Epidemiological Investigations)

(1) Pursuant to Article 43 (2) of the Act, the Agency may conduct an epidemiological investigation in any the following cases: <Amended July 12, 2010>

1. where the employer, worker representative, health manager (or a health management service provider) or physician of a medical examination provider requests an epidemiological investigation into any occupational disease that work environment monitoring under Article 42 of the Act or a medical examination under Article 43 of the Act alone is not sufficient to determine whether a worker has contracted;
2. where the Agency the Korea Labor Welfare Corporation under Article 10 of the Industrial Accident Compensation Insurance Act requests an epidemiological investigation to determine the existence of occupational diseases as prescribed by the Presidential Decree the Minister of Employment and Labor;
3. where the Agency deems the investigation necessary to prevent occupational diseases and obtains a review by the Epidemiological Investigation Evaluation Committee under Article 107-3 (1); or
4. where the head of a local labor authority requests the investigation due to, inter alia, the necessity to identify any links between harmful agents and any disease that has created public sensation as to whether such disease is considered occupational.

(2) If the employer or the worker representative requests an epidemiological investigation under paragraph (1) 1, such investigation shall require a resolution of the Occupational Safety and Health Committee or the consent of the other party (either the worker representative or the employer), except where the head of the competent local labor authority recognizes the necessity for the epidemiological investigation. <Amended July 12, 2010>

(3) Upon the request of the employer or worker representative, the Agency shall have the employer or worker representative participate in the applicable

epidemiological investigation.

(4) The Minister of Employment and Labor shall prescribe and publish matters necessary for, inter alia, the methods of epidemiological investigations under paragraph (1). <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 107-3 (Epidemiological Investigation Evaluation Committee)

(1) The Agency shall establish and operate the Epidemiological Investigation Evaluation Committee in order to ensure, inter alia, fair evaluation of results of epidemiological investigations, and the development of protective measures for workers' health.

(2) The Minister of Employment and Labor shall prescribe such matters as may be necessary for, inter alia, the organization, function and operation of the Epidemiological Investigation Evaluation Committee as set forth in in paragraph (1). <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

CHAPTER III HEALTH MANAGEMENT POCKETBOOK

Article 108 (Persons to Be Issued Health Management Pocketbooks)

The activities and workers for which the Minister of Employment and Labor is required to issue health management pocketbooks (hereinafter referred to as "pocketbooks") shall be as set forth in Table 14-2. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 109 (Procedures for Issuance of Health Management Pocketbooks)

(1) Any person intending to receive the pocketbook shall file an application with the Agency; provided, however, that the employer may apply for the issuance of pocketbooks to the Agency if so requested by the worker employed by such employer.

(2) Any person intending to apply for the issuance of the pocketbook shall file with the Agency an application for issuance of a health management pocketbook in the form of Schedule 23 as well as documents evidencing facts falling within the scope of any subparagraph of Table 14-2 and two photographs as attached thereto.

(3) Upon receiving an application for issuance under paragraph (2), the Agency shall require the employer (or the employer at the time of leaving the position with the employer if the worker has left) to submit the individual medical examination sheet of the applicable worker and shall prepare and issue a pocketbook in accordance therewith.

(4) If the employer has been issued a pocketbook by the Agency under the proviso of paragraph (1), the employer shall promptly forward the pocketbook to the applicable worker.

<Wholly amended Aug. 7, 2009>

Article 110 (Form of Health Management Pocketbooks)

The pocketbook under Article 44 (3) of the Act shall be in the form of Schedules 24 (1) and 24 (2).

<Wholly amended Aug. 7, 2009>

Article 110-2 (Medical Examination of Pocketbook Holder)

If any worker having received a pocketbook (hereinafter referred to as a “pocketbook holder”) becomes no longer engaged in the activities subject to the issuance of pocketbooks, such pocketbook holder may receive one medical examination conducted by the Agency or a special medical examination provider every year (excluding the year in which the holder became no longer engaged in the activities subject to the issuance of pocketbooks), except during any period in which such worker is again engaged in the same activities as the activities subject to the issuance of pocketbooks.

<Wholly amended Aug. 7, 2009>

Article 111 (Recommendation for Medical Examinations)

Upon issuance of a pocketbook, the Agency may recommend the pocketbook holder to receive a medical examination or take such other measures as may be necessary to protect the holder’ s health.

<Wholly amended Aug. 7, 2009>

Article 112 (Submission of Health Management Pocketbooks)

(1) In receiving a medical examination, the pocketbook holder shall submit his or her pocketbook to the health care provider conducting such examination.

(2) Any health care provider conducting a medical examination under paragraph (1) shall record the results of the medical examination of the pocketbook holder in the pocketbook.

(3) The provisions of Article 105 (4) shall be applicable mutatis mutandis to any health care provider under paragraph (2).

(4) The Minister of Employment and Labor shall prescribe and publish the methods of medical examinations of pocketbook holders and other necessary matters. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 113 (Use of Health Management Pocketbooks)

If a pocketbook holder applies for medical care benefits under Article 41 of the Industrial Accident Compensation Insurance Act, The pocketbook may be submitted in lieu of a physician's medical opinion in the first examination of the applicable accident. <Amended June 30, 2005; Sep. 18, 2008>

<Wholly amended Apr. 29, 1995>

Article 114 (Reissuance etc. of Health Management Pocketbooks)

(1) If a pocketbook holder has lost his or her pocketbook or the pocketbook is worn out to the point of being not usable, the holder shall immediately file with the Agency an application for reissuance of a health management pocketbook in the form of Schedule 23 to obtain reissuance thereof.

(2) If any person whose pocketbook is worn out to the point of being not usable files an application under paragraph (1), such pocketbook shall be attached to the application.

(3) If a pocketbook holder finds a lost pocketbook after being reissued another pocketbook, the holder shall immediately destroy or return it to the Agency.

(4) If the domicile of a pocketbook holder has changed, the pocketbook holder shall submit to the Agency an application for modification of statements in the health management pocketbook in the form of Chinese 23 as well as the applicable pocketbook within thirty days of such change.

<Wholly amended Aug. 7, 2009>

Article 115 (Return of Pocketbooks)

In the event of the death of a pocketbook holder, the heir or legal representative

of the pocketbook holder shall promptly return the pocketbook to the Agency.

<Wholly amended Aug. 7, 2009>

CHAPTER IV (Prohibition of Sick Persons from Working etc.)

<Amended Aug. 7, 2009>

Article 116 (Prohibition of Sick Persons from Working)

(1) Pursuant to Article 45 (1) of the Act, the employer shall prohibit any of the following persons from working: <Amended July 12, 2010; Mar. 3, 2011>

1. any person with a potentially contagious or infectious disease, except where measures have been taken to prevent contagion or infection;
2. any person with schizophrenia or dementia paralytica;
3. any person with a heart, kidney or lung disease whose disease may be aggravated by work; or
4. any person with such disease similar to those set forth in the provisions of subparagraphs 1 through 3 as prescribed by the Minister of Employment and Labor.

(2) If the employer prohibits any worker from working under paragraph (1) or allows the worker to resume working, the employer shall, in advance, hear the opinions of a health manager (only where the manager is a physician), an occupational physician or a physician who has conducted the medical examination.

<Wholly amended Aug. 7, 2009>

Article 117 (Restrictions on Employment of Sick Persons)

(1) The employer shall not engage any person poisoned by organic compounds, metal or any other harmful substances as discovered in a medical examination under Article 99, any person deemed by a physician likely to be poisoned by harmful substances, any person with findings of pneumoconiosis, or any person exposed to radiation, in any activities of handling the applicable harmful substances or radiation, any activities emitting dust, vapor or gas of the applicable harmful substances, or any activities potentially aggravating the health of the worker.

(2) The employer shall not engage any worker with any of the following diseases in any activities involving high pressure:

1. decompression sickness or any other disorders or aftereffects caused by high

pressure;

2. tuberculosis, acute upper respiratory infection, pneumoconiosis, emphysema, or any other diseases of the respiratory tract;
3. anemia, valvular heart disease, coronary sclerosis, hypertension, or any other diseases of the blood or circulatory tract;
4. psychoneurosis, alcoholism, neuralgia or any other diseases of the nervous system
5. Meniere' s disease, otitis media, or any other ear diseases accompanying assessmentory tube constriction;
6. arthritis, rheumatism, or any other diseases of the motor system; or
7. asthma, obesity, Graves' disease, or any other diseases related to allergic reactions, the endocrine system, metabolism or nutritional disorders.

<Wholly amended Aug. 7, 2009>

Article 118 Deleted. <Mar. 21, 1992>

Article 119 Deleted. <Mar. 21, 1992>

PART VI SUPERVISION, ORDER, ETC. <Amended Aug. 7, 2009>

CHAPTER I HARM AND HAZARD PREVENTION PLANS ETC.

<Amended Aug. 7, 2009>

Article 120 (Types etc. of Subject Workplaces)

- (1) The term “machinery, apparatus, equipment, etc., prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 48
- (2) of the Act shall refer to any of the following, where the Minister of Employment and Labor shall prescribe and publish the specific scope of machinery, apparatus and equipment falling within the scope of the provisions of paragraphs (1) through (5): <Amended July 12, 2010>

1. melting furnaces for metal or other minerals;
2. chemical equipment;
3. drying equipment;
4. propane/acetylene cylinder manifolds; or
5. equipment related to harmful substances subject to permit or control or

equipment related to dust generating work

(2) The phrase “construction work prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 48 (3) of the Act shall refer to any of the following work: [<Amended July 12, 2010>](#)

1. the construction, retrofitting or dismantling (hereinafter referred to as “construction etc.”) of: a building or manmade structure whose height above ground is 31 meters or more, a building whose total floor space is 30,000 m² or more or cultural and assembly facility (other than exhibition facilities, zoos and botanical gardens) whose total floor space is 5,000 m² or more, retail facilities, transport facilities (other than high-speed rail station buildings and consolidation and distribution facilities), religious facilities, general hospitals, tourism and accommodation facilities, underground malls, or walk-in freezer or refrigeration facilities;
2. furnishing and insulation work for walk-in freezer or refrigeration facilities whose total floor space is 5,000 m² or more;
3. construction etc. of a bridge whose maximum span is 50 meters or more;
4. construction etc. of tunnels etc.;
5. construction etc. of a multi-purpose dam, a dam reservoir capable of impounding twenty million tons or more of water, or a local water supply dam; or
6. excavation work reaching ten meters or deeper.

(3) The phrase “person having the qualifications prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 48 (3) of the Act shall refer to any of the following persons: [<Amended July 12, 2010>](#)

1. any occupational safety consultant specializing in construction safety;
2. any professional construction safety engineer or any professional engineer specializing in civil engineering or architecture; or
3. any industrial engineer or higher specializing in construction safety who practices construction safety for seven years or longer (or five years or longer in the case of a certified engineer).

(4) The term “start of construction work” as set forth in Article 48 (3) of the Act shall refer to starting the construction of a facility or structure for which a plan for the prevention of harms and hazards is required to be prepared, where such preparations as site clearing and the installation of temporary offices shall not be deemed included in the construction work as used in the term.

<Wholly amended Aug. 7, 2009>

Article 121 (Required Filings etc.)

(1) If any employer intends to submit a plan for the prevention of harms and hazards under Article 48 (1) of the Act, the employer shall, for each workplace, submit to the Agency two copies of a plan for the prevention of harms and hazards for manufacturing etc. in the form of Schedule 25 as well as the following documents as attached thereto no later than fifteen days prior to the start of the applicable activities. In such case, the Minister of Employment and Labor shall prescribe and publish the standards for the preparation of the plan for the prevention of harms and hazards, the persons required to prepare the plan, review criteria, and any other matters necessary for the review. <Amended July 12, 2010; Jan. 26, 2012>

1. a floor plan of each floor of the building;
2. documents providing an overview of machinery and equipment;
3. a plot plan for machinery and equipment;
4. an overview of work methods including handling and manufacturing of raw materials and products; and
5. any other drawings and documents as prescribed by the Minister of Employment and Labor.

(2) If any employer intends to submit a plan for the prevention of harms and hazards under Article 48 (2) of the Act, the employer shall, for each workplace, submit to the Agency two copies of a plan for the prevention of harms and hazards for manufacturing etc. in the form of Schedule 25 as well as the following documents as attached thereto no later than fifteen days prior to the start of the applicable activities. <Added Jan. 26, 2012>

1. documents providing an overview of the place of installation;
2. drawings of equipment; and
3. any other drawings and documents as prescribed by the Minister of Employment and Labor.

(3) Any employer intending to submit a plan for the prevention of harms and hazards under Article 48 (3) of the Act shall submit to the Agency two copies of a plan for the prevention of harms and hazards in construction in the form of Schedule 26 and the documents as set forth in Table 15 as attached thereto no later than the day immediately preceding the start of construction work. In such

case, if the applicable construction work falls within the scope of work requiring the development of a safety management plan, a document incorporating both the plan for the prevention of harms and hazards and the safety management plan may be submitted. <Amended July 12, 2010; Mar. 3, 2011; Jan. 26, 2012>

(4) Any employer undertaking different projects under subparagraphs of Article 120 (2) that start on different dates in the same workplace may submit separate plans for the prevention of harms and hazards for each project or each type of construction work. In which case, the employer may elect not to submit any documents that are duplicates of other documents attached to those plans for the prevention of harms and hazards that have already been submitted. <Amended Jan. 26, 2012>

(5) The phrase “construction business that suits the criteria prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in the proviso of Article 48 (3) of the Act shall refer to any construction contractor meeting the criteria as set forth in Table 15-2 (hereinafter referred to as a “contractor using in-house review and verification”). <Amended Jan. 26, 2012>

(6) Any contractor using in-house review and verification shall conduct an in-house review of its plan for the prevention of harms and hazards using the method of in-house review and verification as set forth in Table 15-2 and submit to the Agency a report on an in-house review of a plan for the prevention of harms and hazards in the form of Schedule 26-2 no later than the day immediately preceding the start of construction work. <Amended Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

Article 122 (Examination etc. of Plans)

(1) Upon receiving a plan for the prevention of harms and hazards and attachments under Article 121, the Agency shall review the same and notify the employer of results thereof within fifteen days of such receipt; provided, however, that the Agency may elect not to conduct a review if any contractor using in-house review and verification has submitted a report on an in-house review of the plan for the prevention of harms and hazards under Article 121 (4). <Amended Mar. 3, 2011>

(2) With respect to the review of plan for the prevention of harms and hazards under paragraph (1), the Agency may commission any person having sufficient

academic knowledge and professional experience in the field as a review panel member to participate in the reviewing process.

(3) The Agency may pay allowances and travel expenses to the panel members who have participated in the review of plans for the prevention of harms and hazards, with the exception of any members whose participation is directly relevant to their respective duties.

(4) With respect to any erections, machinery, apparatus, equipment and/or construction work as prescribed by the Minister of Employment and Labor, the employer may obtain an assessment of its plan for the prevention of harms and hazards as conducted by an occupational safety consultant or occupational hygiene consultant (hereinafter referred to as a “consultant”) who is registered under Article 52-4 of the Act and meets such requirements as prescribed by the Minister of Employment and Labor, and submit the results of such assessment in the form of Schedule 26-3. In such case, the Agency may examine the written assessment in lieu of the review of the plan if the assessment is deemed adequate in content. <Added Jan. 26, 2012>

(5) The assessment of a plan for the prevention of harms and hazards under paragraph (4) shall not be performed by any person who has presented his or her opinions under Article 48 (3) of the Act. <Added Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

Article 123 (Classification of Examination Results)

(1) The Agency shall judge and classify the results of the review of a plan for the prevention of harms and hazards as follows:

1. acceptable: where specific measures as may be necessary for the safety and health of workers are deemed to be ensured;
2. conditionally acceptable: where certain remedy is deemed required to ensure the safety and health of workers; or
3. unacceptable: where it is deemed that the machinery, equipment or erections fail to meet the review standards and are likely to cause material risks, or the plans is fundamentally flawed.

(2) If the review finds the plan acceptable or conditionally acceptable, the Agency shall issue to the employer a notice of results of a plan for the prevention of harms and hazards in the form of Schedule 26-5, stating any issues to be addressed (only where the plan is found to be conditionally

acceptable) and notify the head of the local labor authority thereof. <Amended July 12, 2010>

(3) If the review finds the plan unacceptable, the Agency shall promptly send to the head of the local labor authority a notice of results (unacceptable) of a plan for the prevention of harms and hazards in the form of Schedule 26-6, stating the reason therefor, and notify the governor of special self-governing province, the mayor or head of Gun or Gu exercising jurisdiction over the applicable workplace. <Amended July 12, 2010>

(4) Upon receiving a notice under paragraph (3), the head of the local labor authority shall verify facts stated therein and then issue an order not to start the work or an order to modify the plan or take any other necessary measures. <Amended July 12, 2010>

(5) If the employer has received an order not to start the work or an order to modify the plan from the head of the local labor authority, the employer shall supplement or modify and submit the plan to the Agency. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 123-2 (Making Available etc. of Plan)

(1) Any employer who has obtained a review of its plan for the prevention of harms and hazards or submitted a plan for the prevention of harms and hazards under Article 121 (4) shall make such plan available at the applicable workplace. <Amended Mar. 3, 2011>

(2) Upon occurrence of any event warranting modification of a plan for the prevention of harms and hazards, the employer shall make available the plan as supplemented.

<Wholly amended Aug. 7, 2009>

Article 124 (Verification)

(1) Any employer having submitted its plan for the prevention of harms and hazards under Articles 48 (1) and 48 (2) of the Act shall obtain verification of the following matters at the phase of start-up testing of the applicable erections, machinery, apparatus and/or equipment, and any employer under Article 48 (3) of the Act shall do so under Article 48 (5) each period of no more than six months throughout the project: <Amended Mar. 3, 2011>

1. whether the plan for the prevention of harms and hazards is substantially consistent with actual construction work;
2. whether any modifications to the plan for the prevention of harms and hazards made under Article 123-2 (2) are acceptable; and
3. whether any further harmful or hazardous factors exist.

(2) Any employer using in-house review and verification shall conduct an in-house verification of such matters as set forth in subparagraphs of paragraph (1) in accordance with Schedule 15-2 each period of no more than six months until the applicable construction work is completed; provided, however, that in the event of any fatal accidents (other than any accidents as set forth in items d (4) a), d (4) b) and e of subparagraph 3 of Table 1 during the construction period, a verification by the Agency shall be obtained under paragraph (1). [<Amended Mar. 3, 2011>](#)

(3) *Deleted.* [<Mar. 3, 2011>](#)

(4) With respect to a verification under paragraphs (1) and (2), the Agency shall notify the employer of the schedule thereof in advance.

(5) If the Agency verifies that the prevention of harms and hazards in the applicable workplace is adequately addressed, the Agency shall issue to the employer a notice of results of verification in the form of Schedule 26-7 within five days. If any mildly harmful or hazardous factors have been discovered in the verification, the Agency shall recommend the employer to take remedial measures within a prescribed period of time; provided, however, that if such factors have not been remedied within such period, the Agency shall send to the head of the local labor authority a request for measures required as verified in the form of Schedule 26-8 and an attachment stating the reason therefor within ten days of the expiry of such period. [<Amended July 12, 2010>](#)

(6) If the verification indicates that the existence of material harmful or hazardous factors renders discontinuation of work or use, remedial measures for major facilities etc. necessary, the Agency shall promptly send to the head of the local labor authority a request for measures required as verified in the form of Schedule 26-8 and an attachment stating the reason therefor. [<Amended July 12, 2010>](#)

(7) Upon receiving a request under paragraph (5) or (6), the head of the local labor authority shall verify facts stated therein and then take necessary measures. [<Amended July 12, 2010>](#)

(8) With respect to any erections, machinery, apparatus, equipment and/or construction work under Article 122 (4), if the employer obtains a verification by a consultant meeting such requirements as prescribed by the Minister of Employment and Labor, and submit to the Agency the results thereof in the form of Schedule 26-10, the Agency may substitute such results produced by the consultant for the site visits necessary for the verification under paragraph (1), except, in the case of the construction sector, where any fatal accidents (other than any accidents as set forth in items d (4) and e of subparagraph 3 of Table 1 have occurred within the last two years. <Added Jan. 26, 2012>

(9) The verification of a plan for the prevention of harms and hazards under paragraph (8) shall not be performed by any person who has performed an assessment under Article 122 (4). <Added Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

Article 124-2 (Reporting etc.)

If the Agency has discovered any of the following workplaces with respect to the preparation, submission and/or verification of plans for the prevention of harms and hazards, the Agency shall promptly submit to the head of the local labor authority a report thereon, specifying the name and address of such workplace, the name of the employer etc.: <Amended July 12, 2010>

1. any workplace that has failed to submit its plan for the prevention of harms and hazards;
2. any workplace for which the period of submission of its plan for the prevention of harms and hazards has been expired; or
3. any workplace for which a plan for the prevention of harms and hazards has been prepared without obtaining the opinions of a person having the qualifications as set forth in Article 120 (3).

<Wholly amended Aug. 7, 2009>

Article 125 *Deleted.* <Nov. 23, 1995>

CHAPTER II SAFETY AND HEALTH SURVEYS ETC.

Article 126 (Types of Subject Workplaces)

- (1) The phrase “workplaces prescribed by the Ordinance of the Ministry of

Employment and Labor” as set forth in Article 49 (1) of the Act shall refer to any of the following; provided, however, that in the case of an order to conduct a safety survey as issued under Article 49 (1), any workplace falling within the scope of any item of subparagraph 3 of Table 1 of the Decree shall be excluded:

<Amended July 12, 2010>

1. any workplace where any serious accidents (only those serious accidents resulting from the failure of the employer to take safety and health measures) have occurred, with the exception of any workplace where the annual average rate of occupational accidents by size in the same business sector;
2. any workplace that has been issued an order to develop and implement a safety and health improvement plan under Article 50 (2) of the Act; or
3. any workplace with a significantly high risk of falls, explosions, collapses and other accidents for which the head of the local labor authority deems a safety or health survey necessary.

(2) The order issued under paragraph (1) shall be in the form of Schedule 28.

<Wholly amended Aug. 7, 2009>

Article 127 (Standards for Staffing, Facilities and Equipment of Safety and Health Surveyors)

The standards for the staffing, facilities and equipment of a safety or health surveyor under Article 33–3 of the Decree shall be as set forth in, respectively, Tables 16, 16–2 and 17. <Amended Oct. 16, 1997; Sep. 18, 2008>

<Wholly amended Nov. 23, 1995>

Article 128 (Application etc. for Designation of Surveyors)

(1) Any person intending to be designated as a safety or health surveyor pursuant to Article 33–7 of the Decree shall file (either physically or by electronic means) with the head of the regional employment and labor office an application for designation of a general/safety/health surveyor in the form of Schedule 4 as well as the following documents as attached thereto: <Amended July 12, 2010; Mar. 3, 2011>

1. its Articles of Incorporation;
2. licenses (other than national technical qualifications), career certificates, certificates of employment and other documents evidencing the qualifications

and employment of the persons meeting the staffing standards as set forth in Tables 16, 16–2 and 17;

3. photocopies of building lease agreements or any other documents and facility and equipment specifications evidencing that an office is maintained;
4. a safety or health survey business plan for the first one year.

(2) Upon receiving an application under paragraph (1), the head of the regional employment and labor office shall verify the certificate of corporate register entries and national technical qualifications by accessing administrative information shared under Article 36 (1) of the Electronic Government Act, and require the applicant to attach photocopies of national technical qualifications to the application unless the applicant consents to such verification. <Amended Mar. 3, 2011>

(3) The provisions of Articles 18 (3) through 18 (6) shall be applicable mutatis mutandis to, inter alia, the issuance of certificates of designation to safety and health surveyors, the modification of designation, and the return of certificates of designation.

<Wholly amended Aug. 7, 2009>

Article 129 *Deleted.* <Nov. 23, 1995>

Article 129–2 *Deleted.* <Nov. 23, 1995>

Article 130 (Reporting of Survey Results)

If a safety or health surveyor has conducted a safety or health survey under Article 49 (1) of the Act, the surveyor shall submit to the employer of the applicable workplace and the head of the competent local labor authority a report containing the results of surveys, assessments and measurements falling within the scope of survey details as set forth in Table 9 of the Decree and remedial measures within thirty days of such survey. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 130–2 (Details etc. of Process Safety Reports)

The details to be included in such matters as set forth in subparagraphs of Article 33–7 of the Decree shall be as follows:

1. Process safety data:

- a. the types and quantities of harmful and/or hazardous substances being or to be handled or stored;
 - b. material safety data sheet for harmful and/or hazardous substances;
 - c. a list and specifications of harmful and/or hazardous equipment;
 - d. process and instrumentation drawings describing how to operate harmful and/or hazardous equipment;
 - e. a layout of all buildings and equipment;
 - f. sectional diagram of explosion hazardous areas and electrical single line diagrams; and
 - g. guidelines on the safety design, fabrication and installation of hazardous equipment.
2. Process risk assessment and measures to prevent accidents and minimize damage caused by potential hazard:
- The process risk assessment report shall be prepared by conducting and referring to the results of a risk assessment using a selection of one or more of the following risk assessment methods, where such selection shall be made by taking into account, inter alia, the characteristics of the process. The measures to prevent accidents and minimize damage shall be developed only where the risk assessment recognizes the existence of potential hazard.
- a. checklists;
 - b. Dow and Mond Indices;
 - c. human error analyses (HEA);
 - d. what ifs;
 - e. hazard and operability (HAZOP) studies;
 - f. failure mode, effect and criticality analyses (FMECA);
 - g. fault tree analyses (FTA);
 - h. event tree analyses (ETA);
 - i. cause-consequence analyses (CCA); or
 - j. technical evaluation methods equivalent to or surpassing the methods as set forth in the provisions of items a through i.
3. Safety operation plan:
- a. safe operating guidelines;
 - b. equipment checks, inspection and servicing plans, maintenance plans and guidelines;
 - c. approval for safe work;

- d. contractor safety programs;
 - e. training plans for workers et al.;
 - f. guidelines for pre-commissioning checks;
 - g. modification management plans;
 - h. in-house assessment and accident investigation plans; and
 - i. any other matters as may be necessary for safe operation.
4. Emergency action plans:
- a. a breakdown of equipment and personnel available for emergency actions;
 - b. a system for emergency communication with departments and relevant organizations to be used in the event of accidents;
 - c. the organizational duties and procedures for emergency actions to be taken in the event of accidents;
 - d. training plans in accordance with emergency action plans;
 - e. local resident information plans; and
 - f. any other matters related to emergency actions.

<Wholly amended Aug. 7, 2009>

Article 130-3 (Date of Submission of Process Safety Reports)

Pursuant to Article 33-8, the employer shall prepare and submit to the Agency two copies of a process safety management report no later than thirty days prior to the start of: the installation or relocation of harmful or hazardous equipment; or the modification of any structural parts thereof.

<Wholly amended Aug. 7, 2009>

Article 130-4 (Review etc. of Process Safety Reports)

(1) Upon receiving a process safety report under Article 130-3, the Agency shall review the report and forward one copy thereof to the employer and notify the head of the local labor authority of the details thereof within thirty days of such receipt. <Amended Jan. 26, 2012>

(2) If the review of a process safety report performed under paragraph (1) recognizes its relevance to the fire prevention and fire service under the Safety Control of Dangerous Substances Act, the Agency shall notify the head of the competent fire department thereof.

(3) The employer shall retain the process safety report forwarded under paragraph (1) for a period of five years following the date of receipt.

<Wholly amended Aug. 7, 2009>

Article 130-5 (Standards for Preparation etc.)

The Minister of Employment and Labor shall prescribe the standards for the preparation of process safety reports under Article 33-8 (1) of the Decree, the persons required to prepare the reports, review criteria, and any other matters necessary for the review. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 130-6 (Verification etc.)

(1) Any employer who has submitted a process safety report and obtained a review thereof shall have it verified by the Agency in accordance with Article 49-2 (6) of the Act within the following time frames; provided, however, that the Agency may elect not to perform verification if the employer has (i) ensured that an occupational safety consultant specializing in chemical engineering or any person who holds a position of assistant professor or higher at a college and is responsible for a course related to chemical engineering conduct an in-house assessment under item 3 h of Article 130-2; and (ii) submitted to the Agency the results thereof: <Amended Jan. 26, 2012>

1. for any harmful or hazardous equipment to be newly installed, once during installation and once at the phase of start-up testing upon installation;
2. for any harmful or hazardous equipment that has previously been installed and in use, within six months of the completion of the review;
3. with respect to any material modification of processes related to harmful or hazardous equipment, within one month of the completion of the modification; or
4. in the event of any serious accidents resulting from or any material flaws of harmful or hazardous equipment or any process related thereto, within one month.

(2) Within one month of receipt of the request for verification from the employer, the Agency shall verify the details as set forth in subparagraphs 1 through 4 of Article 130 against facts observed on-site. Within fifteen days of such verification, the Agency shall notify the employer and the head of the local labor authority thereof. <Amended Mar. 3, 2011; Jan. 26, 2012>

<Wholly amended Aug. 7, 2009>

Article 130-7 (Assessment of Implementation of Process Safety Reports)

(1) Pursuant to Article 49-2 (9), the Minister of Employment and Labor shall assess how the process safety report is being implemented (hereinafter referred to as “implementation assessment”) within one year of the completion of the review of the process safety report conducted under paragraph (3) of the same Article; provided, however, that such assessment may be conducted after such one-year period upon the request of the employer in the event of work delays occurring during the new installation of harmful or hazardous equipment requiring the process safety report under Article 33-6 of the Decree, or under any other unavoidable circumstances. <Amended July 12, 2010; Jan. 26, 2012>

(2) The Minister of Employment and Labor shall conduct implementation assessment every four years following the assessment conducted under paragraph (1); provided, however, that such assessment may be performed every year or every two years upon the request of the employer. <Amended July 12, 2010>

(3) Any implementation assessment shall be performed on such details of a process safety report as set forth in subparagraphs of Article 130-2.

(4) The Minister of Employment and Labor shall prescribe the methods of implementation assessment and any other matters necessary therefor. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 131 (Workplaces Required to Develop Safety and Health Improvement Plans)

(1) The workplace that may be ordered by the head of the local labor authority to develop and implement a safety and health improvement plan in accordance with Article 50 (1) of the Act shall refer to any of the following workplaces that requires improvement in its facilities: <Amended July 12, 2010>

1. any workplace where the rate of occupational accidents is higher than the average rate by size in the same business sector;
2. any workplace where the work environment is significantly poor;
3. any workplace where two or more serious accidents (only those serious accidents resulting from the failure of the employer to take safety and health measures) have occurred during any year; or
4. any such workplace similar to those as set forth in the provisions of

subparagraphs 1 through 3 as prescribed and published by the Minister of Employment and Labor.

(2) The order to develop and implement a safety and health improvement plan issued under paragraph (1) shall be in the form of Schedule 29.

(3) Any employer ordered to develop and implement a safety and health improvement plan under paragraph (1) shall prepare a safety and health improvement plan as prescribed by the Minister of Employment and Labor and submit to the head of the competent local labor authority within sixty days of the receipt of such order. [<Amended July 12, 2010>](#)

(4) The safety and health improvement plan under paragraph (3) shall address facilities, the safety and health management system, safety and health training, and such matters as may be necessary to prevent industrial accidents and improve the work environment.

(5) The head of the local labor authority shall examine the adequacy of the safety and health improvement plan and notify the employer thereof, where such head may request the Agency or a consultant to verify the adequacy of the safety and health improvement plan. [<Amended July 12, 2010; Jan. 26, 2012>](#)

(6) Where the examination under paragraph (5) deems it necessary, the head of the local labor authority may order the employer to supplement the applicable safety and health improvement plan. [<Amended July 12, 2010>](#)

(7) The workplace that may be ordered to obtain a safety and health survey and develop and submit a safety and health improvement plan in accordance with Article 50 (2) of the Act shall refer to any of the following workplaces: [<Amended July 12, 2010>](#)

1. any workplace falling within the scope of paragraph (1) 1 where any serious accidents (serious accidents resulting from the failure of the employer to take safety and health measures only) have occurred;
2. any workplace where the rate of industrial accidents is twice as high as the average rate in the same business sector or higher;
3. any workplace where two or more persons (or three or more persons in the case of any workplace employing one thousand workers or more on an ongoing basis) have contracted occupational diseases;
4. any workplace that has created public sensation due to, inter alia, a poor work environment, fires, explosions or leakage accidents; and
5. any such workplace similar to those as set forth in the provisions of

subparagraphs 1 through 4 as prescribed by the Minister of Employment and Labor.

<Wholly amended Aug. 7, 2009>

Article 132 *Deleted.* <July 7, 2003>

Chapter III CONSULTING, INSPECTION ETC.

Article 132-2 (Inspection Criteria)

(1) The phrase “any such case ... as are prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 51 (1) of the Act shall refer to any of the following cases: <Amended July 12, 2010>

1. where an industrial accident has occurred or is imminent;
2. where an investigation into a report, legal action or complaint lodged by workers is necessary;
3. where an inspection is necessary for the investigation into a crime committed in violation of the Act or an order issued under the Act or the performance of the duties of law enforcement officials; or
4. where an inspection is deemed necessary by the Minister of Employment and Labor or the head of the local labor authority to investigate whether the Act or an order issued under the Act has been violated.

<Wholly amended Aug. 7, 2009>

Article 133 (Time Frame for Reporting or Appearance)

(1) If the head of the local labor authority intends to issue an order to report or appear pursuant to Article 51 (2), a period of no less than seven days shall be prescribed unless urgency is required. <Amended July 12, 2010>

(2) The order to report or appear under paragraph (1) shall be in writing.

<Wholly amended Aug. 7, 2009>

Article 133-2 (Discontinuance of Use)

(1) If a verification under Article 51 (1) of the Act indicates that an employer's failure to take necessary measures for safety and health may cause significant harms or hazards to workers, and the Minister of Employment and Labor thus intends to order such employer to discontinue the use of erections and/or other

erections, machinery, apparatus, equipment and/or raw materials accessory thereto (hereinafter referred to as “erections etc.”), the Minister may issue and affix an order to discontinue use in the form of Schedule 30 or any other indications as prescribed by the Minister (hereinafter referred to as “orders to discontinue use etc.”). [<Amended July 12, 2010>](#)

(2) Upon receiving orders to discontinue use etc. under paragraph (1), the employer shall inform the relevant workers thereof.

(3) Any employer in receipt of orders to discontinue use etc. under paragraph (1) shall not use the applicable erections etc. during a period starting at the issuance thereof and ending on a date on which the Minister of Employment and Labor lifts the order upon the completion of remedial measures. [<Amended July 12, 2010>](#)

(4) The employer shall not arbitrarily deface or remove from the applicable erections etc. any orders to discontinue use etc. issued or affixed under paragraph (1).

[<Wholly amended Aug. 7, 2009>](#)

Article 134 (Lifting of Order to Discontinue Use)

(1) Upon completion of measures necessary for safety and health, the employer in receipt of orders to discontinue use etc. under Article 133-2 (1) shall immediately file a report with the Minister of Employment and Labor and request that the order be lifted. [<Amended July 12, 2010>](#)

(2) Upon receipt of a request under paragraph (1), the Minister of Employment and Labor shall cause a labor inspector to verify that measures necessary for safety and health have been taken in connection with the applicable erections etc., and shall immediately lift the orders to discontinue use etc. if the applicable measures are deemed to have been completed. [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 135 (Discontinuance of Work)

(1) Pursuant to Article 51 (7) of the Act, the Minister of Employment and Labor may issue a stop work order in the form of Schedule 30: (i) if a verification under Article 51 (1) of the Act indicates that an employer’s failure to take necessary measures for safety and health may cause significant harms or hazards to workers; (ii) if the order to discontinue use under Article 133-2 (1) has not

been complied with; or (iii) if harms and/or hazards are not deemed to have been eliminated or remedied. <Amended July 12, 2010>

(2) The provisions of Article 134 shall be applicable mutatis mutandis to the lifting of a stop work order.

<Wholly amended Aug. 7, 2009>

Article 135-2 (Posting of Correction Order)

Pursuant to the latter part of Article 51 (6) of the Act, any employer having been issued a correction order by the Minister of Employment and Labor due to a violation of the Act shall post the content of such order at the place of violation, on the company bulletin board etc. until the applicable correction is made. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 136 (Request for Suspension of Business etc.)

(1) If an employer falls within the scope of any subparagraph of Article 51-2 (1) of the Act, the Minister of Employment and Labor may request the head of any organization designated as a government-owned corporation under Article 6 of the Act on the Management of Public Institutions to impose any of the following penalties against such employer: <Amended July 12, 2010>

1. suspension of business under Article 82 (1) 6 of the Framework Act on the Construction Industry; or
2. limitations imposed on bidder eligibility under Article 27 of the Act on Contracts to Which the State is a Party, Article 31 of the Act on Contracts to Which a Local Government is a Party, and Article 39 of the Act on the Management of Public Institutions.

(2) The phrase “accidents where two workers or more simultaneously die” as set forth in subparagraph 1 of Article 33-10 of the Decree shall refer to any accident where two or more workers decease primarily due to such accident within seventy two hours.

<Wholly amended Aug. 7, 2009>

Article 136-2 (Partial Exemption from Exams)

(1) The qualifications eligible for such exemption in the consultant exam as set forth in Article 52-3 (2) of the Act and Article 33-15 (2) of the Decree and

the exempted subjects by qualification are as follows; provided, however, that the exemption for any person falling within the scope of any of subparagraphs 1 through 3 shall be limited to the consultant examination for the applicable field only: [<Amended Jan. 26, 2012>](#)

1. any professional engineer specializing in mechanical safety, electrical safety, chemical engineering safety, construction safety, or occupational hygiene as set forth as safety management fields in Table 2 of the Enforcement Regulations of the National Technical Qualifications Act or any occupational and environmental physician under the Medical Services Act: Required Major, Required Common I and Required Common II as set forth in Schedule 12 of the Decree;
2. any person who has exclusively practiced in the field of occupational safety or occupational hygiene for three years or more after acquiring a doctoral degree in mechanical, electrical or chemical engineering, construction (either civil engineering or architecture), or hygiene: Required Major and Required Common II as set forth in Schedule 12 of the Decree;
3. any professional engineer specializing in the mechanical, electrical/electronic (limited to electrical subcategories only), chemical, or construction (either civil engineering subcategories or architectural subcategories) job category as set forth in Table 2 of the Enforcement Regulations of the National Technical Qualifications Act or any person holding a doctoral degree in mechanical, electrical or chemical engineering, construction (either civil engineering or architecture), or hygiene: Required Major as set forth in Schedule 12 of the Decree; or
4. any certified labor affairs consultant under the Certified Labor Affairs Consultant Act: Required Common I as set forth in Schedule 12 of the Decree.

(2) If any person falling within the scope of any subparagraph of paragraph (1) intends to obtain an exemption from part of the consultant examination, such person shall attach the following documents to an application for the examination submitted under Article 136-5 (1):

1. one copy of a certificate issued by the issuer of the applicable license or doctoral degree certificate (limited to doctoral degree certificates clearly stating a major field of study equivalent to the applicable field covered by the exam); and

2. one copy of a career certificate (This attachment shall be required for only those falling within the scope of paragraph (1) 2 and shall clearly specify the history of a career dedicated to the field of occupational safety or occupational hygiene for three years or more.).

<Wholly amended Aug. 7, 2009>

Article 136-3 (Administering Body of Examinations)

Pursuant to Article 52-3 (3) of the Act, the Minister of Employment and Labor shall engage the Human Resources Development Service of Korea under the Human Resources Development Service of Korea Act (hereinafter referred to as the “HRDK”) to administer consultant examinations for and on behalf of the Minister. <Amended Dec. 21, 2007; July 12, 2010>

<Article added Nov. 23, 1995>

Article 136-4 (Announcement of Examinations)

If the HRDK intends to offer a consultant examination, the HRDK shall make a public announcement of applicant eligibility, test subjects, the time, date and place of the examination, application procedures, and any other information necessary for the examination in a newspaper in daily circulation no later than sixty days prior to the examination.

<Wholly amended Aug. 7, 2009>

Article 136-5 (Issuance of Admission Tickets etc.)

(1) Any person intending to take a consultant examination shall prepare and submit to the HRDK an application in the form of Schedule 31.

(2) Upon receiving an application under paragraph (1), the HRDK shall record statements therein in a list of applicants in the form of Schedule 32 and issue to the applicant an admission ticket in the form as set forth in the bottom half of Schedule 31; provided, however, that in the event of omission of any statements or attachments, the HRDK may require the applicant to supplement the application or attachments and refuse to accept the application if such supplementation is not made.

(3) If any person having paid test fees under Article 66 (1) 11 of the Act falls within the scope of any of the following cases, the HRDK shall return, in whole or in part, test fees as specified below. <Amended Mar. 16, 2011; Jan. 26, 2012>

1. where fees have been erroneously paid: the full amount erroneously paid;
2. where the applicant has not been able to take the examination due to any fault attributable to the HRDK: the full amount of the fees paid;
3. where the application is revoked within the filing period: the full amount of the fees paid;
4. where the application is revoked after the expiry of the filing period but no later than twenty days prior to the date of the examination: the full amount of the fees paid; or
5. where the application is revoked after the expiry of the period as set forth in paragraph (4) but no later than ten days prior to the date of the examination: fifty percent of the fees paid.

<Wholly amended Aug. 7, 2009>

Article 136-6 (Announcement of Successful Applicants)

Upon the finalization of a list of successful applicants for the consultant examination under Article 33-16 of the Decree, the HRDK shall publicly announce the list in such manner that all applicants could be informed and notify the successful applicants thereof.

<Wholly amended Aug. 7, 2009>

Article 136-7 Deleted. <Oct. 16, 1997>

Article 136-8 (Application for Registration etc.)

(1) Any person intending to be registered as a consultant pursuant to Article 52-4 (1) of the Act shall file, with the head of the local labor authority exercising jurisdiction over the area in which such person intends to open a principal office (or the domicile of such person if no office is to be maintained), an application for registration in the form of Schedule 33 as well as the following documents as attached thereto, where no dual application for registration may be filed: <Amended July 12, 2010>

1. one copy of a curriculum vitae; and
 2. two copies of a half business card size photograph (a bust shot taken without wearing any head coverings within a six-month period immediately preceding the date of application only).
- (2) Upon receiving an application for registration under paragraph (1), the head

of the local labor authority shall issue to the applicant a certificate of registration in the form of Schedule 34 within thirty days of receipt of such application if such application meets the requirements as set forth in Article 52-4 (3).

<Amended July 12, 2010>

(3) In any event requiring modification of the registration under paragraph (2), the consultant shall promptly submit to the head of the local labor authority an application for modification of registration in the form of Schedule 33. <Amended July 12, 2010; Mar. 3, 2011>

(4) If a certificate of registration issued under paragraph (2) is lost or becomes unusable or if the registration is modified under paragraph (3), the consultant shall submit to the head of the local labor authority an application for reissuance of a certificate of registration as well as the certificate of registration as attached thereto (unless the certificate is lost) and obtain reissuance of the certificate.

<Amended July 12, 2010>

(5) If a certificate is issued or reissued under the provisions of paragraphs (2) through (4), the head of the local labor authority shall record the same in the register of consultants in the form of Schedule 37 and in the register of issuance of certificates in the form of Schedule 38. In which case, the register of consultants and the register of issuance of certificates shall be maintained by electronic means except where extraordinary circumstances render electronic processing impractical. <Amended July 12, 2010>

<Wholly amended Aug. 7, 2009>

Article 136-9 (Insurance Coverage, Payout etc. for Indemnity)

(1) Any consultant (or consulting firm incorporated under Article 52-4 (2) of the Act, if any; hereinafter the same shall apply in this Article) having purchased insurance coverage for indemnity under Article 33-18 (1) of the Decree shall submit to the head of the local labor authority exercising jurisdiction over its principal office (or the domicile of such person if no office is maintained; hereinafter the same shall apply) a notice of professional liability insurance coverage in the form of Schedule 39 as well as evidentiary documents as attached thereto within twenty days of such purchase. <Amended July 12, 2010>

(2) Prior to the expiry of the applicable professional liability insurance coverage, the consultant shall purchase coverage again and submit to the head of the local labor authority exercising jurisdiction over its principal office a notice of

professional liability insurance coverage in the form of Schedule 39 as well as evidentiary documents as attached thereto within twenty days of such purchase.

[<Amended July 12, 2010>](#)

(3) If a client under Article 52–7 (1) of the Act intends to receive an professional liability insurance payout as compensation for damage, such client shall submit to the head of the local labor authority exercising jurisdiction over the principal office of the applicable consultant an application for verification of an occurrence covered by professional liability insurance as well as a settlement agreement on liability between the client and the consultant, a reconciliation protocol, a photocopy of a final judgment issued by the court, or any other documents having a similar effect as attached. In such case, the head of the local labor authority shall promptly issue a verification of an occurrence covered by professional liability insurance in the form of Schedule 41. [<Amended July 12, 2010>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 136–10 (Development of Services Provided by Consultants etc.)

The phrase “matters ... as prescribed by the Ordinance of the Ministry of Employment and Labor” as set forth in subparagraph 3 of Article 52–5 of the Act shall refer to the following:

1. the measuring and assessment of consulting performance;
2. support for the enhancement of the technical consulting capability of the consultant;
3. support for consulting services provided for SMEs; and
4. the development of consulting standards to prevent bad faith or unfair consulting services and promote solid consulting services.

[<Article added Jan. 26, 2012>](#)

PART VII *Deleted.* [<July 7, 2003>](#)

Article 137 *Deleted.* [<July 7, 2003>](#)

Article 138 *Deleted.* [<July 7, 2003>](#)

Article 139 *Deleted.* [<July 7, 2003>](#)

Article 140 *Deleted.* <July 7, 2003>

Article 141 *Deleted.* <July 7, 2003>

Article 142 *Deleted.* <July 7, 2003>

PART VIII SUPPLEMENTARY PROVISIONS <Amended Aug. 7, 2009>

Article 143 (Restitution of and Restrictions on Subsidies and Support)

(1) The phrase “cases provided for by the Ordinance of the Ministry of Employment and Labor” as set forth in Article 62 (2) 6 of the Act shall refer to any case in which workers decease due to material defects or gross negligence in the maintenance of the applicable facilities or equipment within three years of the granting of subsidies and/or support. <Amended July 12, 2010; Jan. 26, 2012>

(2) The period of time for which restrictions may be placed on subsidies and/or support pursuant to Article 62–4 of the Act shall be as follows: <Amended Jan. 26, 2012>

1. in the case as set forth in Article 62 (2) 1 of the Act: three years;
2. in any case as set forth in subparagraphs 2 through 6 of Article 62 (2) of the Act: one year; or
3. in the event of such violation of any of subparagraphs 2 through 6 of Article 62 (2) of the Act as committed within two years of a previous violation of any of subparagraphs 2 through 6 of the same Article: two years.

<Wholly amended Aug. 7, 2009>

Article 143–2 (Criteria for Revocation of Designation, Suspension etc.)

(1) The criteria for the revocation of designation, the suspension of activities etc. under Article 63–2 (2) of the Act shall be as set forth in Table 20.

(2) Where an administrative measure is to be rendered in accordance with the criteria as set forth in paragraph (1), the Minister of Employment and Labor or the head of a local labor authority may mitigate or aggravate the administrative measure by taking into account the question of gross negligence or willful misconduct of the person against whom the measure is made and any other

extenuating circumstances. <Amended July 12, 2010>
<Wholly amended Aug. 7, 2009>

Article 144 (Retention of Documents)

(1) Any documents recording the results of work environment monitoring under Article 94 pursuant to the proviso of Article 64 (1) of the Act shall be retained (either physically or by electronic means) for a period of five years; provided, however, that any documents containing records regarding such substances verified to be carcinogenic as published by the Minister of Employment and Labor shall be retained for a period of thirty years. <Amended July 12, 2010>

(2) Upon performing work environment monitoring, the designated monitoring service provider shall retain documents stating the following pursuant to Article 64 (4) of the Act: <Amended Jan. 26, 2012>

1. the name and location of the workplace monitored;
2. the year, month and date of monitoring;
3. the name of the person who performed monitoring;
4. monitoring methods and results; and
5. the person who performed an analysis, analysis methods, analyzed data and any other matters related to the analysis if the analysis has been performed using instruments.

(3) The consultant shall retain documents stating the following pursuant to Article 64 (5) of the Act: <Amended Jan. 26, 2012>

1. the name and address of the client (whether or not the client is a juristic person);
2. the date on which the consultant is retained by the client;
3. consulting items; and
4. the amount of fees paid by the client.

(4) Pursuant to Article 64 (6) of the Act, any asbestos disposal and removal service provider shall retain documents stating the following: <Amended Jan. 26, 2012>

1. the name and location of the site of asbestos disposal and removal;
2. personal identification information of asbestos disposal and removal workers (names, dates of birth etc.); and
3. the details and period of work.

<Wholly amended Aug. 7, 2009>

Article 145 (Fees etc.)

(1) The Minister of Employment and Labor shall prescribe and publish the fees under Article 66 (1) of the Act. [<Amended July 12, 2010>](#)

(2) Any fees under paragraph (1) paid to the Agency or a nonprofit corporation may be paid in cash, with electronic funds, using electronic payment, or any other means similar thereto by using the information and communication network as set forth in Article 14 of the Electronic Government Act. [<Amended Mar. 3, 2011>](#)

[<Wholly amended Aug. 7, 2009>](#)

Article 146 *Deleted.* [<Sep. 18, 2008>](#)

ADDENDA [<No. 47, Jan. 26, 2012>](#)

Article 1 (Date of Enforcement)

These Regulations shall come into force on January 26, 2012.

Article 2 (Applications to Inspection of Tower Cranes)

The revised provisions of Article 73 shall be applicable to any tower cranes that are newly installed upon enforcement of these Regulations.

Article 3 (Applications to Submission of Harm and Hazard Prevention Plans)

The revised provisions of Articles 121 (1) and 121 (2) shall be applicable to any such work performed to install or relocate erections, machinery, apparatus, equipment etc. related to the applicable business operation or modify any structural parts thereof as started at least one month after the date of enforcement of these Regulations.

Article 4 (Applications to Criteria for Calculation of Rate of Industrial Accidents)

The revised provisions of subparagraph 3 d of Table 1 shall be applicable to any industrial accidents occurring after the enforcement of these Regulations, and the revised provisions of subparagraph 3 e thereof shall be applicable in the first year and thereafter for which the rate of industrial accidents is required to be

calculated following the enforcement of these Regulations.

Article 5 (Transitional Measures for Job Training Providers, Safety Certification Organizations, and Safety Inspection Organizations)

Any organization that remains engaged to provide job training or safety certification and/or inspection services at the time of the enforcement of these Regulations shall be deemed to have filed for the registration or designation of a job training provider, safety certification organization, or safety inspection organization, respectively, under these Regulations.

Article 6 (Transitional Measures for Criteria for Administrative Measures)

Notwithstanding the revised provisions of Table 20, the previous regulations shall be applicable to any administrative measure taken against any violation committed prior to the enforcement of these Regulations.

[Table 1] <Amended Mar. 3, 2011>

The Criteria and Method for Calculating the Industrial Accident Rate and the Number of Violations of the Obligation to Report Industrial Accidents of the Construction Contractor(referred to in Article

3-2 (1))

1. The construction contractors who are subject to bonus or penalty points in reference to the industrial accident rate and the number of violations of the obligation to report industrial accidents shall be such contractors as designated by the Minister of Employment and Labor who are also in a list published by the Minister of Land, Transport and Maritime Affairs by taking into account their bidding capacity pursuant to Article 23 of the Framework Act on the Construction Industry each year.
2. The industrial accident rate of any construction contractor shall be converted using the following formula and then rounded to the second decimal place:

$$\text{The converted accident rate} = \frac{\text{the converted number of workers affected}}{\text{the number of ongoing workers}} \times 100$$

3. In the formula set forth in subparagraph 2, the converted number of workers affected shall be calculated using the following standards and methods:
 - a. The converted number of workers affected shall be the sum of all workers affected by industrial accidents at domestic sites of construction projects executed by the applicable contractor (including its own projects; hereinafter the same shall apply) during the period starting on January 1 and ending on December 31 of the year for which the converted accident rate is to be calculated.
 - 1) For any contractor executing a general construction project under Article 8 of the Framework Act on the Construction Industry, the converted number of workers affected shall be the sum of: the number of affected workers of such contractor; and the number of affected workers of any other contractors contracted by such contractor at sites of projects executed by such contractor (including affected workers of any subcontractors of such other contractors; hereinafter the same shall apply).
 - 2) If any general contractor (A) has contracted another general contractor (B) with the approval of the project owner pursuant to Article 29 (3) of the Framework Act on the Construction Industry, the number of affected workers of the contracted general contractor (B) and that of its subcontractor (C) shall be added up, and a half of the sum shall be added to both the number of affected workers of the primary contractor (A) and that of the contracted contractor (B); provided, however, that if there is any court decision with respect to any industrial accident, the number of workers affected by such accident shall be added solely to that of the general contractor liable for such accident.
 - 3) If the failure to submit an industrial accident investigation sheet under Article 4 (1) results in the Minister of Employment and Labor discovering the occurrence of any industrial accident at any time after the year in which the accident occurs, the number of workers affected by such accident shall be counted

toward the number of workers affected by industrial accidents occurring in the year of such discovery.

- b. If two or more contractors enter into a joint contract in accordance with Article 25 of the Act on Contracts to Which the State is a Party and jointly execute the project the number of workers affected by industrial accidents occurring in the applicable sites shall be distributed according to the shareholding ratio of the consortium.
- c. If any workers of an employer who has signed a contract for installation, dismantling, equipment lease, supply of goods etc. with a person executing a construction project (such person shall include the host employer, any person executing its own project and their contractors) are affected by an industrial accident while performing activities related to such project, such workers shall be counted toward the number of affected workers of such person executing the project.
- d. Weighting factors may be assigned to any deaths resulting from industrial accidents as follows:
 - 1) The weighting factor shall be ten times that of injuries.
 - 2) If the year of occurrence of the accident differs from the year of death, the weighting factor as set forth in 1) shall be assigned only where the death occurs no later than March 31 of the year immediately following the year of occurrence of the accident.
 - 3) If the negligence to report an industrial accident in accordance with Article 4 (1) results in the Minister of Employment and Labor discovering the occurrence of any deaths caused by an industrial accident at any time after the year in which the accident occurs, the number of deaths shall be counted toward the number of workers affected by industrial accidents occurring in the year of such discovery, and the weighting factor as set forth in 1) shall be assigned.
 - 4) No weighting factors shall be assigned to deaths where the immediate cause of the applicable accident is deemed not to be a violation of law committed by the employer in any of the following cases:
 - a) in the case of any traffic accident other than accidents occurring on the road under the Road Traffic Act (other than any case as set forth in subparagraph 3 d.1));
 - b) where the death has been caused by hypertension or any other chronic disease of the person; or
 - c) where a court decision etc. with respect to the applicable accident establishes that the employer (including its contractors, subcontractors, and any other employers who have signed contracts for installation, dismantling, equipment lease, supply of goods etc. with such employer) and actors involved in the accident have committed no negligence.
- e. In any of the following cases, any workers affected by industrial accidents not caused by a violation of law committed by the employer shall be excluded from the calculation of the number of workers affected by industrial accidents:
 - 1) where the accident has been caused by arson or violence between workers or

others;

- 2) where the accident has been caused by any accident occurring on the road under the Road Traffic Act (other than any accidents caused by construction vehicles and equipment use for the applicable project);
 - 3) where the accident is a *force majeure* event caused by a typhoon, flood, earthquake, avalanche, or any other act of God;
 - 4) where the accident has been caused by the negligence of a third person unrelated to work (other than the negligence committed by workers in the course of completion of an intended object); or
 - 5) where the accident has no direct relation to construction activities as in the case of picnics, field days, accidents occurring during sleeping hours and breaks etc.
4. In the formula set forth in subparagraph 2, the number of ongoing workers shall be calculated as follows:

$$\text{The number of ongoing workers} = \frac{\begin{array}{c} \text{the annual monetary amount of completed} \\ \text{domestic projects} \times \text{the labor cost} \\ \text{percentage} \end{array}}{\begin{array}{c} \text{the monthly average wage in the} \\ \text{construction industry} \times 12 \end{array}}$$










- a. The *annual monetary amount of completed domestic projects* shall be the sum of the amounts as calculated by a trade association of construction contractors established under the Framework Act on the Construction Industry, an association of contractors established under the Electrical Construction Business Act, and the Korea Information & Communication Contractors Association establishment under the Information and Communication Work Business Act for the contractor in question.
 - b. The *labor cost percentage* shall be such labor cost percentage for general construction projects (excluding the labor cost percentage for subcontractors) as published by the Minister of Employment and Labor under Article 11 (1) of the Enforcement Decree of the Act on the Collection of Insurance Premiums, etc. for Employment Insurance and Industrial Accident Compensation Insurance.
 - c. The *monthly average wage in the construction industry* shall be such monthly average wage in the construction industry as published by the Minister of Employment and Labor under Article 2 (1) 3 a of the Enforcement Decree of the Act on the Collection of Insurance Premiums, etc. for Employment Insurance and Industrial Accident Compensation Insurance.
5. The Minister of Employment and Labor may organize and operate a review panel consisting of one or more persons in each of the following categories to review whether to assign weighting factors, whether to calculate the number of workers affected by industrial accidents etc. under subparagraphs 3 d and 3 e:
- a. any person who holds a position of assistant professor or higher and specializes in a field closely related to construction safety at a junior college or higher;
 - b. any officer or employee of the Agency holding a construction-related position of Grade II or higher; and
 - c. any professional construction safety engineer or occupational safety

consultant(specializing in construction safety only) or any other person having sufficient academic knowledge and professional experience in construction safety.

6. The number of violations of the obligation to report industrial accidents shall be calculated as prescribed in the following items:
 - a. The number of violations of the obligation to report industrial accidents shall be applicable to any industrial accident occurring at a domestic construction site only where a violation of the reporting obligation under Article 10 of the Act(other than any violation thereof as a result of the failure to meet the time frame as set forth in Article 4 (1)) has resulted in a civil penalty being imposed.
 - b. For any contractor executing a general construction project under Article 8 of the Framework Act on the Construction Industry, the number of violations of the obligation to report industrial accidents shall include the number of violations thereof committed by any other contractors contracted by such general contractor(including their subcontractors).
 - c. If any general contractor (A) has contracted another general contractor (B) with the approval of the project owner pursuant to Article 29 (3) of the Framework Act on the Construction Industry, the number of violations of the obligation to report industrial accidents committed by the contracted general contractor (B) and that of its subcontractor (C) shall be added up, and a half of the sum shall be added to the number of violations committed by the primary contractor (A) and the number of violations committed by the contracted contractor (B), respectively.
 - d. If two or more contractors enter into a joint contract in accordance with Article 25 of the Act on Contracts to Which the State is a Party and jointly execute the project, The number of violations of the obligation to report industrial accidents shall be distributed according to the shareholding ratio of the consortium.

[Table 1-2] <Amended Mar. 3, 2011>
The Types and Shapes of Safety and Health Signs
 (referred to in Article 6 (1))

1.	101 Do not enter 	102 No pedestrian traffic 	103 No motor vehicles 	104 Do not use 	105 Do not board 	106 No smoking 
107 No fire 	108 Do not move objects 	2.	201 Highly inflammable 	202 Oxidizing agent 	203 Explosives 	204 Toxic hazard 
205 Corrosive materials 	206 Radioactive materials 	207 High voltage 	208 Overhead crane 	209 Falling objects 	210 High temperature 	211 Low temperature 
212 Trip hazard 	213 Laser light 	214 Carcinogens, mutagens, reproductive toxins, systemic toxins, and/or respiratory sensitizers 	215 Hazardous area 	3.	301 Wear goggles 	302 Use gas mask 
303 Wear dust mask 	304 Wear face shield 	305 Wear safety helmet 	306 Wear ear plugs 	307 Wear safety shoes 	308 Wear gloves 	309 Wear protective clothing 

4.		401 Green cross 	402 First aid 	403 Stretcher 	404 Eye washer 	405 Emergency equipment 	406 Exit 
407 Exit to left 	408 Exit to right 	5.	501 Sites where substances requiring permits are handled <div>Authorized personnel only [Names of substances] in manufacture/use/storage Wear protective equipment/clothing No smoking or food in this area</div>	502 Asbestos handling and removal sites <div>Authorized personnel only Asbestos hazard Wear protective equipment/clothing No smoking or food in this area</div>		503 Labs et al. handling prohibited materials <div>Authorized personnel only Carcinogens Wear protective equipment/clothing No smoking or food in this area</div>	
6.				<ul style="list-style-type: none">▶ Always keep safety in mind to ensure my health and well-being.▶ Always keep safety in mind to ensure the happiness and security of my family.▶ Always keep safety in mind to prevent my mistakes from injuring my colleagues.▶ Always keep safety in mind to keep myself from causing an accident and damaging the property of the company.▶ Always keep safety in mind to prevent my carelessness and unsafe behavior from impairing the prosperity of my country.			

[Table 2] <Amended Mar. 3, 2011>

The Uses by Type, Places of Use, Shapes, and Color Schemes of Safety and Health Signs(referred to in Articles 6 (1), 8, and 9 (1))

Cat.	Type	Use and place of use	Example of place of use	Shapes		Color scheme
				Template model no.	Safety and health sign no.	
Prohibition signs	1. Do not enter	Where it is necessary to control access to certain areas	An entrance to an area where things are assembled or dismantled	1	101	White for the background, red for the template model, and black for other symbols and images
	2. No pedestrian traffic	Where people should not walk around	Where heavy equipment are operated	1	102	
	3. No motor vehicles	Where it is necessary to prohibit vehicle and transportation equipment traffic	Where heavy pedestrian traffic is anticipated	1	103	
	4. Do not use	Where it is necessary to prohibit machinery, apparatus and equipment from being touched or operated due to repairs, malfunction, etc.	Malfunctioning machinery	1	104	
	5. Do not board	To prohibit elevators from being boarded or certain areas from being accessed	Malfunctioning elevators	1	105	
	6. No smoking	Where people should not smoke		1	106	
	7. No fire	Where a fire could occur and the use of fire is prohibited	Where chemicals are handled	1	107	
	8. Do not move objects	Where it is necessary to store things that are kept in order or should not be moved	Next to an energy saving switch	1	108	
Warning signs	1. Highly inflammable	Where there is gasoline or any other substance requiring extreme care in handling fire	Gasoline tank	2	201	Yellow for the background, and black for the template model and other symbols and images

2. Oxidizing agent	Where there is a substance that is highly oxidizing when heated or compressed or when highly acidic or basic substances are added	Nitric tank	2	202	In the case of warnings against highly inflammable substances, oxidizing agents, explosives, toxic hazards, corrosive materials, carcinogens, mutagens, reproductive toxins, systemic toxins, or respiratory sensitizers, however, no color for the background and red (or possibly black) for the template model
3. Explosives	Where there is an explosive substance	Explosives storage	2	203	
4. Toxic hazard	Where there is an acutely toxic substance	Where agrochemicals are manufactured or stored	2	204	
5. Corrosive materials	Where there is a substance corrosive to body or objects	Sulfuric acid storage	2	205	
6. Radioactive materials	Where there are radioactive materials	Where radioactive isotopes are used	2	206	
7. High voltage	At a power plant or where high voltage hazards exist	Entrance to an area with electric shock hazards	2	207	
8. Overhead crane	Where there are overhead cranes or other suspended objects	Entrance to an area where cranes exist	2	208	
9. Falling objects	Where there are stones, blocks and other objects that may fall	Entrance to an area scaffolds are installed	2	209	
10. High temperature	Where there is an object generating significant heat or the temperature is very high	Entrance to an area where metal casting is performed	2	210	
11. Low temperature	Where there is a very cold object or the temperature is very low	Entrance to an area where work is performed in the freezer	2	211	
12. Trip hazard	Where the floor is slippery or people may trip	Entrance to a sloped walkway	2	212	
13. Laser light	Where people may be exposed to laser light	Entrance to a laser laboratory	2	213	

	14.Carcinogen s, mutagens, reproductive toxins, systemic toxins, and/or respiratory sensitizers	Where there are carcinogens, mutagens, reproductive toxins, systemic toxins, and/or respiratory sensitizers	Where lead dust is generated	2	214	
	15.Hazardous area	Any other hazardous objects or areas where such objects exist	In front of a manhole, or where high-temperature metal scrap is disposed	2	215	
Instruc tional signs	1. Wear goggles	Where work or access requires goggles to be worn	Entrance to a grinding shop	3	301	Blue for the background and white for other symbols and images
	2. Use gas mask	Where work or access requires a gas mask to be worn	Entrance to an area where harmful substances are handled	3	302	
	3. Wear dust mask	Where work or access requires a dust mask to be worn	Where there is a significant amount of dust	3	303	
	4. Wear face shield	Where work or access requires a face shield to be worn	Entrance to a welding shop	3	304	
	5. Wear safety helmet	Where work or access requires a hard hat or safety helmet to be worn	Entrance to a mine shaft	3	305	
	6. Wear ear plugs	Highly noisy area or any other area where work or access requires ear plugs to be worn	Entrance to an area where sheet metal work is performed	3	306	
	7. Wear safety shoes	Where work or access requires safety shoes to be worn	Entrance to an area where coal mining is performed	3	307	
	8. Wear gloves	Where work or access requires safety gloves to be worn	Entrance to an area where high- or low-temperature objects are	3 3	308 309	

	9. Wear protective clothing	Where work or access requires heat- or cold-resistant clothing or any other safety clothing to be worn	handled Entrance to a forging shop			
Information signs	1. Green cross	Where it is necessary to enhance safety awareness	Construction sites and other conspicuous places	1 (Excluding the oblique)	401	White for the background, and green for the template model and other symbols Green for the background, and white for the template model and other symbols
	2. First aid	Where first aid equipment exists	In front of a first aid station	4	402	
	3. Stretcher	Where emergency stretchers exist	In front of a first aid station	4	403	
	4. Eye washer	Where eye washers exist	In front of a first aid station	4	404	
	5. Emergency equipment	Where emergency equipment exists	In front of emergency equipment	4	405	
	6. Exit	Exits	In front of a first aid station	4	406	
	7. Exit to left	Where it is necessary inform people that an exit is on the left	In front of a first aid station	4	407	
	8. Exit to right	Where it is necessary inform people that an exit is on the right	In front of a first aid station	4	408	
Access restriction signs	1. Substances requiring permits handled	Areas where harmful substances requiring permits are manufactured or handled	Entrance (or any other place highly visible to workers if outdoors or there is no entrance)	5	501	Black for the first line and red for subsequent lines in the white background – [] manufactured/used/stored – Asbestos being handled/removed – Carcinogens handled
	2. Asbestos handling and removal	Areas where asbestos products are manufactured, used, handled and removed		5	502	
	3. Prohibited substances handled	Areas where prohibited substances are manufactured or equipment using such substances is installed		5	503	

[Table 3] <Amended Mar. 3, 2011>

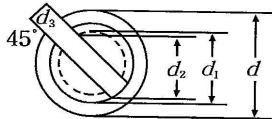
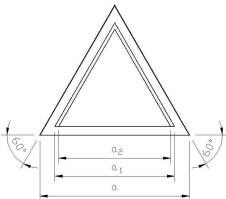
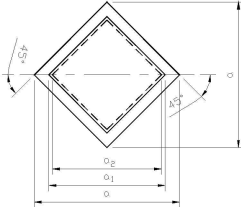
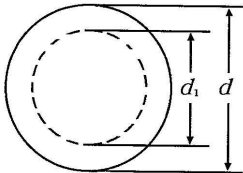
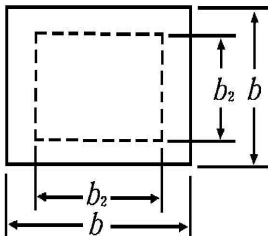
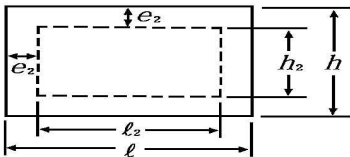

The Colors, Color Notations, and Uses of Safety and Health Signs
(referred to in Article 8)

Color	Color notation	Use	Example use
Red	7.5R 4/14	Prohibition	Stop signs, fire extinguishing equipment and places where such equipment is kept, and the prohibition of dangerous acts
		Warning	Warning against harms and hazards where chemicals are handled
Yellow	5Y 8.5/12	Warning	Warnings against hazards (other than warnings against harms and hazards where chemicals are handled), cautions, or machine guards
Blue	2.5PB 4/10	Instruction	Instructions to perform certain acts or reminders of certain facts
Green	2.5G 4/10	Information	Signs for exits, shelters, and pedestrian or vehicle traffic
White	N9.5		Contrast color for blue or green
Black	N0.5		For text or as a contrast color for red or yellow

(Ref.)

1. Allowable errors are $H=\pm 2$ for hue, $V=\pm 0.3$ for value, and $C=\pm 1$ for chroma.
2. The above color notations are in accordance with the Korean Industrial Standard for Color Notation Using Three Attributes(KSA 0062; Korean Agency for Technology and Standard Publication No. 2008-0759).

[Table 4] <Amended Mar. 3, 2011>
The Template Models of Safety and Health Signs
 (referred to in Article 9 (1))

No .	Template Models	Ratio (Size)	Sign
1		$d \geq 0.025L$ $d_1 = 0.8d$ $0.7d < d_2 < 0.8d$ $d_3 = 0.1d$	Prohibition
2		$a \geq 0.034L$ $a_1 = 0.8a$ $0.7a < a_2 < 0.8a$	Warning
		$a \geq 0.025L$ $a_1 = 0.8a$ $0.7a < a_2 < 0.8a$	
3		$d \geq 0.025L$ $d_1 = 0.8d$	Instruction
4		$b \geq 0.0224L$ $b_2 = 0.8b$	Information
5		$h < L$ $h_2 = 0.8h$ $L \times h \geq 0.0005L^2$ $h - h_2 = L - L_2 = 2e_2$ $L/h = 1, 2, 4, 8$ (4type)	Information
6		1. Model Size (larger than width 40cm, length 25cm)	Do not enter except

	<div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 150px;"> <div style="border-bottom: 1px dotted black; height: 20px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px dotted black; height: 20px; margin-bottom: 5px;"></div> <div style="height: 20px;"></div> </div> <p>In the Model, letters which divided by A, B and C have to be inserted.</p>	<p>2. Letter Size (A: larger than width 4cm, length 5 cm, B: larger than 2.5cm, length 3cm, C: larger than width 3cm, length 3.5cm)</p>	relative person
<u>7</u>	<div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 150px;"> <div style="border-bottom: 1px dotted black; height: 20px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px dotted black; height: 20px; margin-bottom: 5px;"></div> <div style="height: 20px;"></div> </div> <p>In the Model, letters which divided by A, B and C have to be inserted.</p>	<p>1. Model Size (larger than width 70cm, length 50cm) 2. Letter Size (A: larger than width 8cm, length 10 cm, B, C: larger than width 6cm, length 6cm)</p>	<p style="text-align: center;">D o n o t e n t e r e x c e p t r e l a t i v e p e r s o n</p>

(Ref.)

1. L= Safety distance which must be recognized or can be recognized for the signs of safety and health,(L and *a, b, d, e, h, l must be used as same unit.*).
2. In the dot line, signals and drawings in relation to marking must be drawn.

[Table 5] <Amended Jan. 26, 2012>

The Standards for Staffing, Facilities and Equipment of Safety Management Service Providers(referred to in Article 17)

1. Any registered occupational safety consultant
 - a. Staffing standard: Occupational safety consultant(not specializing in construction safety)
 - b. Facility standard: Offices(including equipment rooms)
 - c. Equipment standard: As set forth in subparagraph 2 a
 - d. Restrictions on service provision(for any single occupational safety consultant):
No more than 30 workplaces or 2,000 workers
2. Any juristic person intending to provide safety management services
 - a. Staffing, facilities and equipment requirements

Staffing	Facility	Equipment	Applicable line of industry
1) One or more of the following persons: a) any occupational safety consultant or professional safety engineer specializing in mechanical, electrical, or chemical engineering; or b) any certified industrial safety engineer who has practiced for ten years or longer(excluding any period of practice in the construction industry). 2) One or more certified industrial safety engineer who has practiced for five years or longer(or seven years or longer in the case of an industrial engineer). 3) Two or more of the following persons (the persons as set forth in a), however, shall account for no less than one half of all): a) any certified industrial safety engineer who has practiced for three years or longer(or five years or longer in the case of an industrial engineer); or b) any certified engineer specializing in mechanical, electrical, chemical or gas engineering who has practiced in such field or the industrial safety field for four years or longer(or six years or longer in the case of a certified engineer). 4) One or more of the following persons (the persons as set forth in a), however, shall account for no less than one half of all if there are two or more persons):	Office (including equipment rooms)	1) Non-destructive magnetic particle testers or ultrasonic thickness gauges 2) Clamp meters 3) Sound level meters 4) Gas concentration meters or gas detectors 5) Oxygen indicators 6) Gas leakage detectors (portable) 7) Insulation resistance meters 8) Static electrometers 9) Lux meters 10) Multimeters 11) Ground resistance meters 12) Torque gauges 13) Voltage detectors(for low, high, and ultrahigh voltages) 14) Thermometers(for testing surface temperatures) 15) Audio-visual training aids(video tape recorders, overhead projectors, or any other training aids having the same capability or better)	All operations (excluding any construction operations)

<p>a) any person having the qualifications for a safety manager under Article 14 of the Decree (other than any person falling within the scope of subparagraphs 8 through 13 of Table 4 of the Decree) who has practiced in the field of industrial safety for six months or more (including any period of internship under Article 22 of the Higher Education Act and subparagraph 5 of Article 3 and Article 7 of the Vocational Education and Training Promotion Act and any other career period similar thereto); or</p> <p>b) any person having the qualifications for an industrial engineer or higher specializing in the mechanical, metal, chemical, electrical, shipbuilding, textile, safety management (fire extinguishing equipment and gas only) or industrial application job category as set forth in Table 2 of the Enforcement Regulations of the National Technical Qualifications Act Article 2 of the Decree who has practiced in such field or the field of industrial safety for three years or more (including any period of internship under Article 22 of the Higher Education Act and subparagraph 5 of Article 3 and Article 7 of the Vocational Education and Training Promotion Act and any other career period similar thereto).</p> <p>* In the case of Jeju Special Self-Governing Province, however, the juristic person shall have in its staff one or more persons falling within the scope of 1) and 2) and two or more persons falling within the scope of 3).</p>			
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- b. Staffing and equipment standards for the number of workplaces or workers to be served are to be provided

1) Staffing standards

According to the following classification, additional personnel as set forth in the provisions of items a 1) through 4) shall be maintained.

Note: If the staffing standard for the number of workplaces differs from that for the number of workers, the more stringent standard shall be applicable.

Classification		Staffing standards by qualification(items a 1) through a 4))				
No. of workplaces or workers		Total	1)	2)	3)	4)
150 or less	10,000 or less	5	1	1	2	1
151 – 180	10,001 – 12,000	6	1	1	3	1
181 – 210	12,001 – 14,000	7	1	1	3	2
211 – 240	14,001 – 16,000	8	1	1	4	2
241 – 270	16,001 – 18,000	9	1	2	4	2
271 – 300	18,001 – 20,000	11	1	2	5	3
301 – 330	20,001 – 22,000	12	2	2	5	3
331 – 360	22,001 – 24,000	13	2	2	6	3
361 – 390	24,001 – 26,000	14	2	2	7	3
391 – 420	26,001 – 28,000	15	2	2	7	4
421 – 450	28,001 – 30,000	16	2	2	8	4
451 – 480	30,001 – 32,000	17	2	3	8	4
481 – 510	32,001 – 34,000	18	2	3	9	4
511 – 540	34,001 – 36,000	19	3	3	9	4
541 – 570	36,001 – 38,000	20	3	3	10	4
571 – 600	38,001 – 40,000	22	3	4	10	5

Note: If the number of workplaces exceeds 600 or the number of workers exceeds 40,000, One more person falling within the scope of 1) through 3) shall be added to the above figures for every additional 30 workplaces or additional 2,000 workers.

- 2) Equipment standards: One more piece of equipment as set forth in 2), 5), 6), and 13) (low voltage detectors only) of item a shall be added for every additional three staff members.

[Table 6] <Amended Jan. 26, 2012>

The Standards for Staffing, Facilities and Equipment of Health Management Service
Providers(referred to in Article 20)

1. Subparagraph 1 of Article 19–2 of the Enforcement Decree
 - a. Staffing standards
 - 1) One or more industrial hygiene consultants
 - 2) One or more persons falling within the scope of subparagraph 2 a 1) a) (including any persons commissioned) (except where an industrial hygiene consultant has the applicable qualifications)
 - b. Facility standards: Offices(including health counseling rooms and health training rooms)
 - c. Equipment standards: As set forth in subparagraph 2 a
 - d. Service restrictions(for any single industrial hygiene consultant): No more than 30 workplaces or 2,000 workers

2. Subparagraphs 2 through 5 of Article 19–2 of the Enforcement Decree
 - a. Where services are to be provided for 100 workplaces or less or 10,000 workers or less
 - 1) Staffing standards
 - a) One or more of the following physicians:
 - (1) any occupational and environmental physicians under the Medical Services Act or any fourth–year residents in the occupational and environmental medicine department;
 - (2) any preventive medicine physicians under the Medical Services Act (specializing in environmental and occupational health); or
 - (3) any physicians who have been engaged in practice or research activities for four years or more in the industrial medicine field of an organization related to industrial medicine or as a full–time health manager of a workplace; provided, however, that any person having qualifications for a clinical medicine physician shall be deemed to have been engaged in practice or research activities for two years or more in the industrial medicine field.
 - b) Two or more registered nurses under the Medical Services Act
 - c) One or more industrial hygiene consultants or certified industrial hygiene engineer or one or more persons who have practiced in the field of occupational health for five years or more since the acquisition of qualifications for a certified industrial hygiene engineer
 - d) One or more industrial engineers of specializing in industrial hygiene management or higher
 - 2) Facility standards: Offices(including health counseling rooms and health training

rooms)

3) Equipment standards:

a) Equipment for managing work environment

- (1) Personal sets of samplers used to sample dust, organic solvents, certain chemicals, toxic gases etc.
- (2) Sets of detectors and gas and steam meters
- (3) Sound level meters capable of frequency analysis
- (4) Wet bulb globe temperature(WBGT) meters capable of producing WBGT indices, and lux meters
- (5) Direct-reading toxic gas(including oxygen) meters
- (6) Equipment for testing the performance of local ventilation facilities: Smoke testers, sound locators or rods, insulation resistance testers, surface thermometers or glass thermometers, hot-wire anemometers with static pressure probes, revolution meters, or any other items of equipment having the same capability or better

b) Health management equipment

- (1) Blood glucose meters
- (2) Sphygmomanometers

c) Health training aids

- (1) Audio-visual training aids (video tape recorders)
- (2) Slide projectors, overhead projectors, or any other training aids having the same capability or better

- b. Where services are to be provided for 101 workplaces or more or 10,001 workers or more, additional personnel as set forth in the provisions of subparagraphs 2 a 1) a) through 2 a 1) d) shall be maintained according to the following classification:

Classification		Staffing standards by qualification (subparagraphs 2 a 1) a) through 2 a 1) d))					
No. of workplaces	No. of workers	Total	a)	b) through d)			
				Subtotal	b)	c)	d)
100 or less	10,000 or less	5	1	4	2	1	1
101 – 125	10,001 – 12,500	*7	*2	5	2 or more	1 or more	1 or more
126 – 150	12,501 – 15,000	*8	*2	6	"	"	"
151 – 175	15,001 – 17,500	9	2	7	"	"	"
176 – 200	17,501 – 20,000	10	2	8	"	"	"
201 – 225	20,001 – 22,500	*12	*3	9	"	"	"
226 – 250	22,501 – 25,000	*13	*3	10	"	"	"
251 – 275	25,001 – 27,500	14	3	11	"	"	"
276 – 300	27,501 – 30,000	15	3	12	"	"	" ,
301 – 325	30,001 – 32,500	*17	*4	13	"	"	"
326 – 350	32,501 – 35,000	*18	*4	14	"	"	"
351 – 375	35,001 – 37,500	19	4	15	"	"	"
376 – 400	37,501 – 40,000	20	4	16	"	"	"
401 – 425	40,001 – 42,500	*22	*5	17	"	"	"
426 – 450	42,501 – 45,000	*23	*5	18	"	"	"
451 – 475	45,001 – 47,500	24	5	19	"	"	"
476 – 500	47,501 – 50,000	25	5	20	"	"	"

Notes:

1. If the number of workplaces is 501 or more or the number of workers is 50,001 or more, one more person falling within the scope of subparagraph 2 a 1) a) shall be added for every additional 100 workplaces or 10,000 workers, and one more person falling within the scope of subparagraph 2 a 1) b), 2 a 1) c), or 2 a 1) d) shall be added for every additional 25 workplaces or 2,500 workers.
2. If the staffing standard for the number of workplaces differs from that for the number of workers, the more stringent standard shall be applicable.
3. "*" The asterisk indicates that if the organization is designated and operated as special medical examination provider as well, one physician of the provider may be used to the extent that such use does not hinder the physician's duties for the provider.

[Table 6-2] <Amended Aug. 7, 2009>

Details of the Safety and Health Management Regulations

(referred to in Article 26)

1. General provisions
 - a. Matters concerning the purpose and scope of the Safety and Health Management Regulations
 - b. Matters concerning the responsibility and obligation of the employer and workers to prevent accidents
 - c. Matters concerning the safety and health management for the workplace of the subcontractor
2. Safety and health management organization and its duties
 - a. Matters concerning the organization, affiliation, duties and responsibilities, etc. of the safety and health management organization
 - b. Matters concerning the duties and appointment of the safety and health manager (or general safety and health manager), safety managers, health managers, and supervisors
 - c. Matters concerning the establishment and operation of the Occupational Safety and Health Committee
 - d. Matters concerning the duties and activities of the honorary industrial safety inspector
 - e. Matters concerning the placement etc. of the work supervisor
3. Safety and health training
 - a. Matters concerning the safety and health training for workers and supervisors
 - b. Matters concerning the establishment, recording etc. of training plans
4. Safety Control
 - a. Matters concerning the establishment and implementation of plans for safety and health management
 - b. Matters concerning protective measures for machinery, apparatus and equipment
 - c. Matters concerning the inspection of harmful and hazardous machinery etc. in accordance with voluntary inspection program or the safety inspection thereof
 - d. Matters concerning the compliance by workers with safety regulations
 - e. Matters concerning the storage of hazardous substances and access restrictions
 - f. Matters concerning the stop work orders issued where a serious accident or serious industrial accident has occurred or is imminent
 - g. Matters concerning the type, placement and posting of safety signs and safety regulations and other matters concerning safety management
5. Workplace health management
 - a. Matters concerning the medical examination of workers, and procedures for implementing work environment monitoring, taking measures etc.

- b. Matters concerning the handling of harmful substances
 - c. Matters concerning the provision etc. of personal protective equipment
 - d. Matters concerning the prohibition of sick persons from working, restrictions on employment thereof etc.
 - e. Matters concerning the type, placement and posting of health signs and health regulations and other matters concerning health management
6. The investigation of accidents and the development of measures
- a. Matters concerning the procedures for handling the occurrence of an industrial accident or a serious industrial accident and taking emergency measures
 - b. Matters concerning the investigation and analysis of the cause of an industrial accident or a serious industrial accident, and the development of measures
 - c. Matters concerning the recording the occurrence of industrial accidents and serious industrial accidents, the maintenance of such records etc.
7. Supplementary provisions
- a. Matters deemed necessary to prevent industrial accidents including the participation in zero accident campaigns, proposals related to safety and health, commendations and awards, disciplinary measures etc.
 - b. Matters concerning the retention of documents on safety and health
 - c. Other matters
- The Regulations may be prepared in a manner befitting the size, line of industry etc. of the workplace by, *inter alia*, adding necessary matters or excluding matters irrelevant to the workplace.

[Table 6-3] <Amended Jan. 26, 2012>

The Standards for Staffing, Facilities and Equipment of Accident Prevention Consulting Organizations(referred to in Article 32-2)

1. Consulting for construction projects(other than electrical construction projects under the Electrical Construction Business Act or information and communication projects under the Information and Communication Work Business Act)
 - a. Any registered occupational safety consultant
 - 1) Staffing standard: Occupational safety consultants(specializing in construction safety)
 - 2) Facility standards: Offices(including equipment rooms)
 - 3) Equipment standards: As set forth in b
 - b. Any juristic person intending to provide accident prevention consulting services

Facility standards	Staffing standards	Equipment standards
Offices (including equipment rooms)	<p>○ Personnel as set forth in the following items:</p> <ol style="list-style-type: none"> 1) One or more occupational safety consultants(specializing in construction safety) or professional construction safety engineers 2) Two or more of the following technical personnel: <ol style="list-style-type: none"> a) any industrial engineer or higher specializing in construction safety who has practiced in the field of construction safety for seven years or longer(or five years or longer in the case of a certified engineer); or b) any industrial engineer or higher specializing in civil engineering or architecture who has practiced in the field of construction for seven years or longer(or five years or longer in the case of a certified engineer) and holds qualifications for a safety manager under Article 14 of the Decree. 3) Two or more of the following technical personnel: <ol style="list-style-type: none"> a) any industrial engineer or higher specializing in construction safety who has practiced in the field of construction safety for three years or longer(or one year or longer in the case of a certified engineer); or b) any industrial engineer or higher specializing in civil engineering or architecture who has practiced in the field of construction for three years or longer(or one year or longer in the case of a certified engineer) and holds qualifications for a safety manager 	<p>One or more units of the following equipment for every two consultants(or for any remaining one consultant if the number of consultants is an odd number):</p> <ol style="list-style-type: none"> a. gas concentration meters; b. oxygen indicators; c. ground resistance meters; d. insulation resistance meters; and e. lux meters

	<p>under Article 14 of the Decree.</p> <p>4) Any person having the qualifications for a safety manager under Article 14 of the Decree (other than any person falling within the scope of subparagraphs 8 through 13 of Table 4 of the Decree) who has practiced in the field of construction safety for two years or more</p>	
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* The number of personnel as set forth in 3) and 4) combined shall not exceed three times the number of personnel as set forth in 1) and 2) combined.

2. Consulting for electrical construction projects and information and communication projects (electrical construction projects under the Electrical Construction Business Act or information and communication projects under the Information and Communication Work Business Act)

a. Any registered occupational safety consultant

- 1) Staffing standard: Occupational safety consultant (specializing in construction safety or electrical safety)
- 2) Facility standards: Offices (including equipment rooms)
- 3) Equipment standards: As set forth in b

b. Any juristic person intending to provide accident prevention consulting services

Facility standards	Staffing standards	Equipment standards
Offices (including equipment rooms)	<p>○ Personnel as set forth in the following items:</p> <p>1) One or more of the following technical personnel:</p> <ol style="list-style-type: none"> a) any occupational safety consultant (specializing in construction or electrical work), professional construction safety engineer, or professional electrical safety engineer; or b) any certified construction safety engineer or certified industrial safety engineer who has practiced in the field of construction safety for nine years or longer. <p>2) Two or more of the following technical personnel:</p> <ol style="list-style-type: none"> a) any industrial engineer or higher specializing in construction safety or industrial safety who has practiced in the field of construction safety for seven years or longer (or five years or longer in the case of a certified engineer); or b) any industrial engineer or higher specializing in civil engineering, architecture, electrical engineering, electrical construction or information and communication who has practiced in the field of construction for seven 	<p>One or more units of the following equipment for every two consultants (or for any remaining one consultant if the number of consultants is an odd number):</p> <ol style="list-style-type: none"> a. gas concentration meters; b. oxygen indicators; c. high pressure alarms; d. voltage detectors; e. lux meters; f. ground resistance meters; and g. insulation resistance meters

	<p>years or longer(or five years or longer in the case of a certified engineer) and holds qualifications for a safety manager under Article 14 of the Decree.</p> <p>3) Two or more of the following technical personnel:</p> <p>a) any industrial engineer or higher specializing in construction safety or industrial safety who has practiced construction safety for three years or longer(or one year or longer in the case of a certified engineer); or</p> <p>b) any industrial engineer or higher specializing in civil engineering, architecture, electrical engineering, electrical construction or information and communication who has practiced in the field of construction for three years or longer(or one year or longer in the case of a certified engineer) and holds qualifications for a safety manager under Article 14 of the Decree.</p> <p>4) Any person having the qualifications for a safety manager under Article 14 of the Decree(other than any person falling within the scope of subparagraphs 8 through 13 of Table 4 of the Decree) who has practiced in the field of construction safety for two years or more</p>	
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* The number of personnel as set forth in items c and d combined shall not exceed three times the number of personnel as set forth items a and b combined.

[Table 6-4] <Amended Mar. 3, 2011>

The Standards for the Consulting Services Provided by an Accident Prevention Consulting Organization (referred to in Article 32-3)

1. Consulting areas covered by accident prevention consulting organizations
The fields of consulting provided by an accident prevention consulting organization for a workplace under Article 30 (4) of the Act (hereinafter referred to as "technical consulting") shall be classified by type of work into: construction project consulting, and electrical project and information and communication project consulting.
2. Technical consulting contract
 - a. Any contractor required to obtain technical consulting provided by a construction accident prevention consulting organization shall enter into a technical consulting contract with a construction accident prevention consulting organization in the form of Schedule 42 within fourteen days of the start of work and maintain documents evidencing the contract.
 - b. Any person executing its own project who is required to obtain technical consulting provided by a construction accident prevention consulting organization shall enter into a technical consulting contract with a construction accident prevention consulting organization in the form of Schedule 42 within fourteen days of the start of work and maintain documents evidencing the contract.
 - c. The project owner may refuse to pay or obtain restitution of an amount equal to 20% of the funds for occupational safety and health management recognized in accordance with Article 30 (1) of the Act to or from any of its contractors who has failed to enter into a technical consulting contract.
 - d. If any delay in the signing by the contractor of a technical consulting contract has resulted in any adjustment to the technical consulting fees, the project owner may refuse to pay or obtain restitution of the amount of such adjustment.
3. Number of technical consulting sessions
 - a. Technical consulting shall be provided in one session per month except under extraordinary circumstances; provided, however, that in the case of any project amounting to 4 billion won or more, a person falling within the scope of item a of subparagraphs 1 and/or 2 of Table 6, for the applicable field of consulting, shall make one visit for every four sessions to provide technical consulting services.
 - b. If early completion of the project, a delay in signing the technical consulting contract, a significantly short duration of work, or any other circumstance similar thereto renders it difficult to meet the standard for the number of sessions, the number of consulting sessions may be adjusted with the approval of the applicable project supervisor (or an engineering consultant if there is no project supervisor).
4. Restrictions on technical consulting; areas of consulting
 - a. The number of workplaces to be covered by one consultant shall be thirty places, where three workplaces shall be counted as one for any site of a project amounting to less than 300 million won in total, and two workplaces shall be counted as one for

any site of a project amounting to no less than 300 million won but less than 4 billion won.

- b. The area in which technical consulting is to be provided by an accident prevention consulting organization shall be the jurisdiction of the regional employment and labor office and other offices under its direction that has designated the organization as an accident prevention consulting organization.

5. Scope of technical consulting; obligations

- a. With respect to technical consulting, the accident prevention consulting organization shall designate a responsible consultant by taking into account, *inter alia*, the type and size of the project, and the number of workplaces covered by such consultant; the responsible consultant shall present to the applicable employer recommendations necessary to disburse the funds for occupational safety and health management and prevent industrial accidents.
- b. In presenting recommendations to the employer, the accident prevention consulting organization shall take into account: the Act; the Decree; the Regulations; safety regulations; health regulations; technical guidelines under Article 27 of the Act; and the standard safety specifications for construction work as published by the Minister of Employment and Labor in accordance with Article 26-2 (3) of the Decree.
- c. Upon receiving remedial recommendations presented by an accident prevention consulting organization, the employer shall comply with such recommendations.

6. Recording of technical consulting results

- a. Upon completion of technical consulting, the accident prevention consulting organization shall prepare two copies of a report on technical consulting results and obtain verification of the report by a project representative, issuing one copy to the workplace and maintaining the other.
- b. The accident prevention consulting organization shall prepare and maintain a workplace management card in the form of Schedule 44. In such case, pictures and/or other supporting materials shall be attached to the workplace management card if remedial recommendations for safety facilities of the workplace have been prepared.

7. Retention of documents on technical consulting

The accident prevention consulting organization shall retain the contract for technical consulting, the report on technical consulting results, the workplace management card, and any other documents on the performance of technical consulting services for a period of three years following the completion of the services.

[Table 7] *Deleted* <Aug. 7, 2009>

[Table 8] <Amended Aug. 7, 2009>

Hours of Occupational Safety and Health Training by Course

1. In-house safety and health training(referred to in Article 33 (1))

Training course	Trainees		Training hours
a. Periodic training	Workers holding office positions		One hour or more per month or three hours or more per quarter
	Workers not holding office positions	Workers engaged in front line sales activities	One hour or more per month or three hours or more per quarter
		Workers engaged in any work as set forth in subparagraph 1 d of Table 8-2	Two hours or more per month
		Workers engaged in any work other than sales activities or work as set forth in subparagraph 1 d of Table 8-2	Two hours or more per month or six hours or more per quarter
	Persons holding managerial and supervisory positions		Eight hours or more per half year or sixteen hours or more per year
b. Training provided upon hiring	Casual workers		One hour or more
	Workers other than casual workers		Eight hours or more
c. Training provided upon changes in work activities	Casual workers		One hour or more
	Workers other than casual workers		Two hours or more
d. Special training	Casual workers engaged in any work as set forth in subparagraph 1 d of Table 8-2		Two hours or more
	Workers other than those engaged in any work as set forth in subparagraph 1 d of Table 8-2		<ul style="list-style-type: none"> - Sixteen hours or more (It is allowed to provide four hours or more of training prior to the first work activity and another twelve hours in installments over a period of three months or less - Two hours or more for any short-term intermittent activities

2. Training for safety and health managers et al.(referred to in Article 39 (2))

Trainees	Training hours	
	Initial training	Refresher training
a. Safety and health managers	6 hours or more	6 hours or more
b. Safety managers	34 hours or more	24 hours or more
c. Health managers	34 hours or more	24 hours or more
d. Persons working for accident prevention consulting organizations	—	24 hours or more

3. Inspector training(referred to in Article 43 (2))

Training course	Trainees	Training hours
Inspector training	—	28 hours or more

[Table 8-2] <Amended Mar. 3, 2011>

Training content by trainee group

1. In-house safety and health training (referred to in Article 33 (1))

a. Periodic safety and health training for workers

Training subjects
<ul style="list-style-type: none"> ○ Matters concerning occupational safety and accident prevention ○ Matters concerning occupational health and occupational disease prevention ○ Matters concerning health promotion and disease prevention ○ Matters concerning the management of harmful and hazardous work environments ○ Matters concerning the Occupational Safety and Health Act and general management

b. Periodic safety and health training for supervisors

Training subjects
<ul style="list-style-type: none"> ○ Matters concerning the harms and hazards of work processes and measures to prevent accidents ○ Matters concerning standard safe work methods and supervisory instructions ○ Matters concerning the roles and duties of supervisors ○ Matters concerning occupational health and occupational disease prevention ○ Matters concerning the management of harmful and hazardous work environments ○ Matters concerning the Occupational Safety and Health Act and general management

c. Training provided upon hiring and changes in work activities

Training subjects
<ul style="list-style-type: none"> ○ Matters concerning hazards of machinery and apparatus, work sequence, and flow path patterns ○ Matters concerning checks made before starting work ○ Matters concerning housekeeping and cleaning ○ Matters concerning emergency measures in the event of accidents ○ Matters concerning occupational health and occupational disease prevention ○ Matters concerning material safety data sheets ○ Matters concerning the Occupational Safety and Health Act and general management

d. Training subjects by work for special safety and health trainees

Name of work	Training subjects
<Common subjects> Work as set forth in subparagraphs 1 through 38	As set forth in item c
<Uncommon subjects> 1. Work performed in plenum chambers(referring exclusively to work performed within a space or vertical shaft pressurized at positive pressure or using the caisson	<ul style="list-style-type: none"> ○ Matters concerning the impact of high pressure hazards on the human body ○ Matters concerning work hours, methods and procedures ○ Matters concerning elementary knowledge of pneumatic methods and the use of PPE

method or any other pneumatic methods)	<ul style="list-style-type: none"> ○ Matters concerning emergency measures in the event of abnormalities ○ Other matters necessary for safety and health management
2. Welding, cutting or heating of metal objects using acetylene torches or propane/acetylene cylinder manifolds(exclusively referring to welding torches and manifolds consisting of cylinders, pipes etc.)	<ul style="list-style-type: none"> ○ Matters concerning the hazard of welding fume, dust, hazard rays etc. ○ Matters concerning the checking of the gas torch, pressure regulator, hose, torch head etc. ○ Matters concerning the work method and sequence and first aid treatment ○ Matters concerning the handling of safety devices and PPE ○ Other matters necessary for safety and health management
3. Welding work in a confined space(referring to a tank or a limited space with very poor ventilation) or electrical welding in a humid space	<ul style="list-style-type: none"> ○ Matters concerning the work sequence, safe work method and regulations ○ Matters concerning ventilation equipment ○ Matters concerning the prevention of electric shocks and the use of PPE ○ Matters concerning first aid measures in the event of asphyxiation ○ Matters concerning the checking of the work environment ○ Other matters necessary for safety and health management
4. Work manufacturing or handling (other than handling for testing or research purposes) explosive, water-reactive, self-reactive or self-heating substances, pyrophoric liquids and solids, and flammable liquids	<ul style="list-style-type: none"> ○ Matters concerning the property or state of explosive, water-reactive, self-reactive or self-heating substances, pyrophoric liquids and solids, and flammable liquids ○ Matters concerning explosion limits, ignition temperatures, and flash points ○ Matters concerning handling methods and safety regulations ○ Matters concerning emergency measures and evacuation instructions upon discovery of abnormalities ○ Matters concerning the prevention of such hazards as fire, static electricity, impact, spontaneous combustion etc. ○ Matters concerning work sequence, handling precautions, protective distances etc. ○ Other matters necessary for safety and health management
5. Work handling devices generating liquefied petroleum gas, hydrogen gas or any other flammable or explosive gases	<ul style="list-style-type: none"> ○ Matters concerning the state and property of gases ○ Matters concerning the prevention of hazards of gas generating devices ○ Matters concerning equipment containing pressurized gas and safe handling methods ○ Instructions for checking equipment and apparatus ○ Other matters necessary for safety and health management
6. Work using and cleaning	<ul style="list-style-type: none"> ○ Matters concerning the handling and precautions

chemical reactors, agitators and extractors	<ul style="list-style-type: none"> for each measuring device ○ Matters concerning the checking of the viewing window, liquid level, flow meter etc. and precautions for operating the valve ○ Matters concerning the hazard of cleaning liquids and their impact on the human body ○ Matters concerning work procedures ○ Other matters necessary for safety and health management
7. In-tank work on chemical equipment	<ul style="list-style-type: none"> ○ Matters concerning the checking of shutoff devices, emergency stop devices and valve switches ○ Matters concerning the measuring of oxygen concentration and the work environment in the tank ○ Matters concerning PPE and first-aid measures upon discovery of abnormalities ○ Matters concerning work procedures and methods and harms and hazards ○ Other matters necessary for safety and health management
8. Work performed inside a hopper, warehouse or storage tank containing powder, raw materials etc.	<ul style="list-style-type: none"> ○ Matters concerning the impact of the powder and raw materials on the human body ○ Matters concerning work performed inside storage tanks and the use of clothing and PPE ○ Matters concerning work assignment, methods, sequence and the checking of work environments ○ Matters concerning the operation and handling of fans and other ventilation equipment ○ Matters concerning the explosion of powder ○ Other matters necessary for safety and health management
9. The use of the following equipment to heat or dry materials: <ul style="list-style-type: none"> a. drying equipment for hazardous materials whose capacity is 1 cubic meter or more; or b. drying equipment for other materials than as set forth in item a using fuel(only where the maximum fuel consumption is 10kilograms or more per hour) or electric power(only where the rated power consumption is 10kilowatts or more) as a heat source 	<ul style="list-style-type: none"> ○ Matters concerning the checking of the inside and outside of drying equipment and the functioning thereof ○ Matters concerning the use of clothing and PPE ○ Matters concerning the impact of the hazardous gas, heat etc. generated in drying operations on the human body ○ Matters concerning the prevention of fires and explosions caused by drying equipment
10. The assembly, dismantling, modification or repair of a yarder(referring to a powered piece of equipment that consists of a grapple, cables, a boom and other objects appurtenant thereto and is used to lift or fly logs,	<ul style="list-style-type: none"> ○ Matters concerning the checking of brakes and emergency stop devices of machinery, transport routes and a range of functions ○ Matters concerning work methods and preparations made before starting work ○ Matters concerning the harms and hazards of the objects to handle ○ Matters concerning emergency measures in the

<p>firewood and charcoal) as set forth in the following items and the use of such equipment to log or transport the same:</p> <ol style="list-style-type: none"> The rated power of the engine exceeds 7.5kilowatts. The total diagonal span is 350meters or more. The maximum load capacity is 200kilograms or more. 	<p>event of structural abnormalities</p> <ul style="list-style-type: none"> ○ Other matters necessary for safety and health management
<p>11. The use of powered mechanical presses at any workplace having five or more of such presses</p>	<ul style="list-style-type: none"> ○ Matters concerning the characteristics and hazards of presses ○ Matters concerning the types and handling of protective devices ○ Matters concerning safe work methods ○ Matters concerning the safety standards for presses ○ Other matters necessary for safety and health management
<p>12. The use of woodworking machines(exclusively referring to circular sawing machines, band sawing machines, planing machines, chamfering machines and routers and excluding portable equipment) at any workplace having five or more of such machines</p>	<ul style="list-style-type: none"> ○ Matters concerning the characteristics and hazards of woodworking machines ○ Matters concerning the types, structure, and handling of protective devices ○ Matters concerning safety standards ○ Matters concerning safe work methods and the handling of wood ○ Other matters necessary for safety and health management
<p>13. The use of transport and loading machines at any workplace having five or more of such machines</p>	<ul style="list-style-type: none"> ○ Matters concerning the checking of transport and loading machines and related accessories ○ Matters concerning work sequence and methods ○ Matters concerning safe operating methods ○ Matters concerning the handling of freight and work signals ○ Other matters necessary for safety and health management
<p>14. The use of a crane whose capacity is 1ton or more, or the use of cranes and hoists whose capacity is less than 1ton at any workplace having five or more of such machines</p>	<ul style="list-style-type: none"> ○ Matters concerning the types, functions, and handling of protective devices ○ Matters concerning the checking of hooks, wire ropes, emergency stop devices and other parts of machinery and apparatus ○ Matters concerning the handling of freight and work methods ○ Matters concerning signaling methods and collaborative work ○ Other matters necessary for safety and health management
<p>15. The use of construction lifts and gondola lifts</p>	<ul style="list-style-type: none"> ○ Matters concerning the functions and use of protective devices ○ Matters concerning the checking of machinery, apparatus, hanging chains, wires etc. ○ Matters concerning the methods for lifting or lowering freight, and consulting on safe work ○ Matters concerning the characteristics and operational principles of machinery and apparatus

	<ul style="list-style-type: none"> ○ Matters concerning signaling methods and collaborative work ○ Other matters necessary for safety and health management
16. Casting and forging	<ul style="list-style-type: none"> ○ Matters concerning the properties of hot materials and the work environment ○ Matters concerning the break-out, casting, and other handling of hot materials, and safe work methods ○ Matters concerning the harms and hazards of handling of hot materials and the use of PPE ○ Matters concerning safety standards and the handling of heavy materials ○ Other matters necessary for safety and health management
17. Work performed with the power shut off or live-line work where the voltage is 75volts or more	<ul style="list-style-type: none"> ○ Matters concerning the hazard of electricity and the prevention of electric shocks ○ Matters concerning the maintenance and checking of the applicable equipment ○ Matters concerning safe work methods and sequence for live-line work and work performed with the power shut off ○ Matters concerning insulating PPE, the use of insulating PPE and apparatus used for live-line work etc. ○ Other matters necessary for safety and health management
18. Breaking work using concrete breakers(exclusively referring to the breaking of structures that are 2meters tall or taller)	<ul style="list-style-type: none"> ○ Matters concerning the dismantling of concrete structures and protective distances ○ Matters concerning safe work measures and safety standards ○ Matters concerning the operation of concrete breakers and common work signals ○ Matters concerning PPE and other protective equipment ○ Other matters necessary for safety and health management
19. Ground excavation(excluding the excavation of any shafts other than tunnels and vertical shafts) where the height of the excavation face is 2meters or more	<ul style="list-style-type: none"> ○ Matters concerning the types and structure of ground and excavation instructions ○ Matters concerning the prevention of cave-in accidents ○ Matters concerning the installation of structures and work methods to prevent cave-ins ○ Matters concerning the types and use of PPE ○ Other matters necessary for safety and health management
20. The reinforcement of sheathing timbering or the installation or dismantling of timbering	<ul style="list-style-type: none"> ○ Matters concerning instructions and methods for checking for work safety ○ Matters concerning safe work in transporting, handling and installing timbering ○ Matters concerning the sequence of dismantling and substance standards therefor ○ Matters concerning the handling and use of PPE ○ Other matters necessary for safety and health management
21. Excavation work performed in a tunnel(excluding any	<ul style="list-style-type: none"> ○ Matters concerning instructions and methods for checking of work environments

excavation work using excavation machines where workers do not approach blades) or the assembly of tunnel shoring or concrete work	<ul style="list-style-type: none"> ○ Matters concerning the installation of structures and safe work methods to prevent cave-ins ○ Matters concerning safety standards for the transportation, handling and installation of materials ○ Matters concerning the types and use of PPE ○ Matters concerning places where fire extinguishing equipment is installed and the use thereof ○ Other matters necessary for safety and health management
22. Excavation of rocks where the height of the excavation face is 2meters or more	<ul style="list-style-type: none"> ○ Matters concerning instructions for handling explosives and evacuating ○ Matters concerning safe distances and safety standards ○ Matters concerning the installation of and standards for guards ○ Matters concerning PPE and signaling methods ○ Other matters necessary for safety and health management
23. The stacking or collapsing of objects whose height is 2meters or more(excluding any work performed using loading machines only)	<ul style="list-style-type: none"> ○ Matters concerning methods and instructions for handling raw and subsidiary materials ○ Matters concerning hazards of objects and the prevention of fall and collapse accidents ○ Matters concerning staking methods and the prevention of toppling over ○ Matters concerning the use of PPE ○ Other matters necessary for safety and health management
24. The stacking, unloading or moving of cargoes on, in or off a ship	<ul style="list-style-type: none"> ○ Matters concerning methods for operating stevedoring machinery and apparatus ○ Matters concerning safe work methods and standards for moving and conveying routes ○ Matters concerning instructions for handling heavy objects and signaling instructions ○ Matters concerning work safety checks and the handling of PPE ○ Other matters necessary for safety and health management
25. The assembly or dismantling of form timbering	<ul style="list-style-type: none"> ○ Matters concerning methods and procedures for assembling timbering ○ Matters concerning methods for handling materials to be assembled, and installation standards ○ Matters concerning the prevention of accidents in assembling or dismantling ○ Matters concerning the use and checking of PPE ○ Other matters necessary for safety and health management
26. The assembly, dismantling, or modification of scaffolding	<ul style="list-style-type: none"> ○ Matters concerning sequence and methods for assembling scaffolds ○ Matters concerning the handling and installation of materials for scaffolding work ○ Matters concerning the prevention of fall accidents ○ Matters concerning the use of PPE

	<ul style="list-style-type: none"> ○ Matters concerning the maximum load for any work performed on scaffolds ○ Other matters necessary for safety and health management
27. The assembly, dismantling or modification of the structural frames of buildings, the upper structures of bridges, or towers that consist of metal members(only where the length is 5meters or more)	<ul style="list-style-type: none"> ○ Matters concerning erection and installation sequence for shoring timber ○ Matters concerning fall accidents and hazardous factors in assembly and dismantling ○ Matters concerning methods for operating erecting machines and exchanging work signals ○ Matters concerning the use of safety equipment and dismantling sequence ○ Other matters necessary for safety and health management
28. The assembly of structural members of a wood building where the eaves height is 5meters or more, or installation thereof under the roof or façade of a building	<ul style="list-style-type: none"> ○ Matters concerning the prevention of collapse, falls and other accidents ○ Matters concerning the strength, material and characteristics of members ○ Matters concerning assembly and installation sequence and safe work methods ○ Matters concerning the use of PPE and checks necessary for work ○ Other matters necessary for safety and health management
29. The dismantling or destruction of a man-made concrete structure(only where its height is 2meters or more)	<ul style="list-style-type: none"> ○ Matters concerning the concrete dismantling machines ○ Matters concerning save distances and evacuation instructions in destroying structures ○ Matters concerning work methods and sequence and signaling methods ○ Matters concerning work safety standards and PPE in dismantling and destroying structures ○ Other matters necessary for safety and health management
30. The installation(including jacking) and dismantling of tower cranes	<ul style="list-style-type: none"> ○ Matters concerning the prevention of collapse, falls and other accidents ○ Matters concerning installation and dismantling sequence and safe work methods ○ Matters concerning the structure, material and characteristics of members ○ Matters concerning signaling methods and instructions ○ Matters concerning emergency measures in the event of abnormalities ○ Other matters necessary for safety and health management
31. The installation and handling of boilers other than smaller boilers and any of the following boilers: a. Any steam boiler whose diameter is 750millimeters or less and length is 1,300millimeters or less	<ul style="list-style-type: none"> ○ Matters concerning the checking of the ignition detectors of machinery and apparatus ○ Matters concerning heat control and protective devices ○ Matters concerning work sequence and methods ○ Other matters necessary for safety and health management

<p>b. Any steam boiler whose heating surface is 3 square meters or less</p> <p>c. Any water boiler whose heating surface is 14 square meters or less</p> <p>d. Any once-through boiler whose heating surface is 30 square meters or less</p>	
<p>32. The installation and handling of pressure vessels where gauge pressure is 1kilogram per square centimeter</p>	<ul style="list-style-type: none"> ○ Matters concerning safety facilities and safety standards ○ Matters concerning the hazard of pressure vessels ○ Matters concerning standards for handling and installing vessels ○ Matters concerning methods and instructions for checking for work safety ○ Other matters necessary for safety and health management
<p>33. Any work related to radioactive operations(other than for medical and experimental purposes)</p>	<ul style="list-style-type: none"> ○ arms and hazards of radioactivity and its impact on the human body ○ Matters concerning the checking of radioactive ray measuring functions ○ Matters concerning protective distances, protective walls and instructions for handling radioactive materials ○ Matters concerning first aid treatment and the use of PPE ○ Other matters necessary for safety and health management
<p>34. Manhole work</p>	<ul style="list-style-type: none"> ○ Matters concerning safety checks of equipment and facilities ○ Matters concerning the measuring of oxygen concentration and the work environment ○ Matters concerning details of work, and safe work methods and procedures ○ Matters concerning the use of PPE and other protective equipment ○ Other matters necessary for safety and health management
<p>35. Work performed in a confined space</p>	<ul style="list-style-type: none"> ○ Matters concerning the measuring of oxygen concentration and the work environment ○ Matters concerning first aid treatment in the event of accidents and rescue in emergency ○ Matters concerning how to wear and use PPE ○ Matters concerning methods for working safely in a confined space ○ Other matters necessary for safety and health management
<p>36. The manufacturing or handling of harmful substances requiring permit or control</p>	<ul style="list-style-type: none"> ○ Matters concerning the property and state of the substance to be handled ○ Impact of the harmful substance on the human body ○ Matters concerning local ventilation devices and

	<ul style="list-style-type: none"> safety facilities ○ Matters concerning safe work methods and PPE use ○ Other matters necessary for safety and health management
37. Work performed using robots	<ul style="list-style-type: none"> ○ Matters concerning the fundamental principles, structures and work methods for using robots ○ Matters concerning emergency measures in the event of abnormalities ○ Matters concerning safety facilities and safety standards ○ Matters concerning control methods and work sequence
38. Asbestos disposal and removal	<ul style="list-style-type: none"> ○ The characteristics and hazard of asbestos ○ Matters concerning methods for disposing of and removing asbestos ○ Matters concerning the use of equipment and PPE ○ Other matters necessary for safety and health management

2. Subjects of training for safety and health managers et al. (referred to in Article 39 (2))

Trainees	Training subjects	
	Initial course	Refresher course
Safety and health managers	<ul style="list-style-type: none"> ○ Matters concerning the responsibilities and duties of managers ○ Matters concerning occupational safety and health laws and safety and health measures 	<ul style="list-style-type: none"> ○ Matters concerning occupational safety and health policies ○ Matters concerning self-regulatory safety and health management
Safety managers	<ul style="list-style-type: none"> ○ Matters concerning occupational safety and health laws ○ Matters concerning an overview of occupational health issues ○ Matters concerning ergonomics and industrial psychology ○ Matters concerning safety training methods ○ Matters concerning first aid treatment in the event of accidents ○ Matters concerning techniques for safety checks and evaluation and accident analysis ○ Matters concerning safety standards, PPE and accident prevention practice in each field ○ Matters concerning standards for the recognition and use of funds for occupational safety and health management ○ Matters concerning work environment improvements and industrial hygiene (including 	<ul style="list-style-type: none"> ○ Matters concerning occupational safety and health laws and policies ○ Matters concerning the establishment, assessment and practice of safety management plans and safety and health improvement plans ○ Matters concerning the practice of implementing safety and health training programs and zero accident campaigns ○ Matters concerning standards for the use of funds for occupational safety and health management and methods for using the same ○ Matters concerning the practice of research on cases of accidents and improvements by field ○ Matters concerning workplace safety improvement techniques ○ Other matters necessary to enhance the job performance of safety managers

	<p>hygiene and protective equipment)</p> <ul style="list-style-type: none"> ○ Matters concerning techniques and practice for staging a zero accident campaign ○ Other matters necessary to enhance the job performance of safety managers 	
Health managers	<ul style="list-style-type: none"> ○ Matters concerning occupational safety and health laws and work environment monitoring ○ Matters concerning an overview of occupational safety and health issues ○ Matters concerning the establishment and assessment of occupational health management plans and occupational epidemiology ○ Matters concerning the work environment and the prevention of occupational disease ○ Matters concerning work environment improvements (noise, dust, harmful substances subject to control, hazardous rays etc.) ○ Matters concerning industrial epidemiology and statistics ○ Matters concerning industrial ventilation ○ Matters concerning safety and health management systems and regulations and the roles of health managers ○ Matters concerning health management plans and the operation thereof ○ Matters concerning worker health management and first aid treatment ○ Other matters necessary to enhance the job performance of health managers 	<ul style="list-style-type: none"> ○ Matters concerning occupational safety and health laws and policies and working environment management ○ Matters concerning instructions for establishing and assessing occupational health management plans and providing safety and health training ○ Matters concerning the enhancement of worker health and the management of emergency patients ○ Matters concerning industrial hygiene and ventilation ○ Matters concerning research on occupational disease cases ○ Matters concerning the management of work environments by hazardous substances ○ Other matters necessary to enhance the job performance of health managers
Persons working for accident prevention consulting organizations		<ul style="list-style-type: none"> ○ Matters concerning occupational safety and health laws and policies ○ Matters concerning research on accident cases by field ○ Matters concerning the introduction of new work methods ○ Matters concerning the safety management of workplaces ○ Other matters necessary to enhance the job performance

3. Subjects of inspector training (referred to in Article 43 (2))

Equipment	Training course	Training subjects
Presses and shearing machines	Inspector training	<ul style="list-style-type: none"> ○ Applicable laws ○ An overview of presses and shearing machines ○ The structure and characteristics of presses and shearing machines ○ Inspection criteria ○ Protective devices ○ The use and method for using inspection equipment ○ Inspection practices and instructions for filling out checklists ○ Hazard detection training
Cranes	Inspector training	<ul style="list-style-type: none"> ○ Applicable laws ○ An overview of cranes ○ Structures and characteristics of cranes ○ Inspection criteria ○ Protective devices ○ The use and method for using inspection equipment ○ Inspection practices and instructions for filling out checklists ○ Hazard detection training ○ Duties of inspectors
Lifts	Inspector training	<ul style="list-style-type: none"> ○ Applicable laws ○ An overview of lifts ○ Structures and characteristics of lifts ○ Inspection criteria ○ Protective devices ○ The use and method for using inspection equipment ○ Inspection practices and instructions for filling out checklists ○ Hazard detection training ○ Duties of inspectors
Gondola lifts	Inspector training	<ul style="list-style-type: none"> ○ Applicable laws ○ An overview of gondola lifts ○ Structures and characteristics of gondola lifts ○ Inspection criteria ○ Protective devices ○ The use and method for using inspection equipment ○ Inspection practices and instructions for filling out checklists ○ Hazard detection training ○ Duties of inspectors
Local ventilation devices	Inspector training	<ul style="list-style-type: none"> ○ Applicable laws ○ An overview of occupational health ○ Fundamental principles of industrial ventilation ○ The design and practice of local ventilation devices ○ Inspection criteria for local ventilation devices and dust collectors ○ Inspection practices and instructions for filling out checklists ○ Duties of inspectors
Centrifuges	Inspector training	<ul style="list-style-type: none"> ○ Applicable laws ○ An overview of centrifuges ○ Types and structure of centrifuges ○ Inspection criteria

		<ul style="list-style-type: none"> ○ Protective devices ○ The use and method for using inspection equipment ○ Inspection practices and instructions for filling out checklists
Chemical equipment, pressure vessels and related accessories	Inspector training	<ul style="list-style-type: none"> ○ Applicable laws ○ An overview of chemical equipment and pressure vessels ○ Types, structure, and characteristics of chemical equipment ○ Inspection criteria for chemical equipment, pressure vessels and related accessories ○ Protective devices ○ The use and method for using inspection equipment ○ Inspection practices and instructions for filling out checklists ○ First aid treatment in the event of abnormalities
Drying equipment and related accessories	Inspector training	<ul style="list-style-type: none"> ○ Applicable laws ○ An overview of drying equipment ○ Types and structure of drying equipment ○ Hazard, characteristics and state of heat sources ○ Inspection criteria ○ The use and method for using inspection equipment ○ Inspection practices and instructions for filling out checklists
Rollers	Inspector training	<ul style="list-style-type: none"> ○ Applicable laws ○ An overview of rollers ○ Structures and characteristics of rollers ○ Inspection criteria ○ Protective devices ○ The use and method for using inspection equipment ○ Inspection practices and instructions for filling out checklists
Injection molding machines	Inspector training	<ul style="list-style-type: none"> ○ Applicable laws ○ An overview of injection molding machines ○ Structures and characteristics of injection molding machines ○ Inspection criteria ○ Protective devices ○ The use and method for using inspection equipment ○ Inspection practices and instructions for filling out checklists

4. Subjects of training on material safety data sheets (referred to in Article 92-5 (2))

Training subjects
<ul style="list-style-type: none"> ○ Types, harms and hazards of chemicals and formulations containing chemicals ○ Safety and health precautions for handling ○ Instructions for first aid treatment and emergency evacuation ○ How to understand material safety data sheet and warning signs ○ How to protect worker health from the harms and hazards of chemicals and formulations containing chemicals

[Table 8-3] <Amended Mar. 3, 2011>

Documents by Type of Assessment to File for Safety Certification
(referred to in Article 58-3 (1))

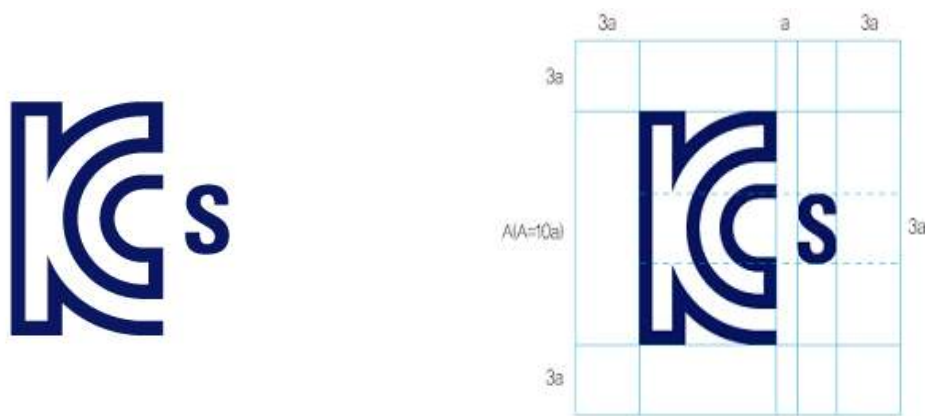
Type of assessment	Machinery, apparatus and equipment under Articles 34 (2) and 34 (4) of the Act	Protective devices and PPE under Articles 34 (2) and 19 (4) of the Act;
Preliminary assessment	<ol style="list-style-type: none"> 1. Documents on the use and features of the product to be certified 2. User's manual 3. Outside views and layout drawings of the product 	Same as left
Documentary assessment	<p>Two copies of the following documents:</p> <ol style="list-style-type: none"> 1. a photocopy of a corporate taxpayer registration certificate; 2. documents evidencing importation (only where imported); 3. documents evidencing the power of attorney (only where the latter part of Article 58-3 (1) is applicable); 4. specifications and user's manuals of the machinery, apparatus or equipment; 5. assembly drawings including a list of parts comprising the machinery, apparatus or equipment; 6. specifications of protective devices included in the machinery, apparatus or equipment and drawing related to the protective devices; and 7. strength calculation sheets for parts, materials, bodies etc. included in the machinery, apparatus or equipment and related drawings (exclusively applicable to such parts, materials, bodies etc. as prescribed and published by the Minister of Employment and Labor) 	<p>Two copies of the following documents:</p> <ol style="list-style-type: none"> 1. a photocopy of a corporate taxpayer registration certificate; 2. a document evidencing importation (only where imported); 3. documents evidencing the power of attorney (only where the latter part of Article 58-3 (1) is applicable); 4. specifications and user's manuals of protective devices and PPE; 5. assembly drawings, parts drawings, circuit drawings and other drawings related to protective devices and PPE; 6. frontal and side photographs of protective devices and PPE and photographs of important parts
Assessment of technical capabilities and production systems	<p>One copy of a document containing the following information:</p> <ol style="list-style-type: none"> 1. the method for establishing and implementing the quality management system; 2. the procedures for verifying the safety of the purchased product and verification details; 3. the procedures for and details of processes, product, management, and the follow-up measures prior 	Same as left

		<p>to and after product release;</p> <ol style="list-style-type: none"> the system and procedures for complementing production and service provision; the identification management system for parts and products and the method for preserving products; the method for monitoring product production processes and maintaining measuring and testing devices and equipment; the method for analyzing process data and taking such measures necessary to addressing and preventing issues; and the procedure for handling non-conforming products 	
Product assessment	Individual product assessment	<p>One copy of the following documents:</p> <ol style="list-style-type: none"> a notice of documentary assessment results; test certificates for the materials included in the machinery, apparatus or equipment; layout drawings of the machinery, apparatus or equipment (only where such item is to be installed); and documents evidencing the safety of crane supporting structures (only where the structures are supported; not applicable where the rated load is less than 10 tons) 	Not applicable
	Product type assessment	<p>One copy of the following documents:</p> <ol style="list-style-type: none"> a notice of documentary assessment results; a notice of technical capability and production system assessment results; and test certificates for the materials included in the machinery, apparatus or equipment 	<p>One copy of the following documents:</p> <ol style="list-style-type: none"> a notice of documentary assessment results; a notice of technical capability and production system assessment results (not applicable in the case as set forth in subparagraph 2 of Article 58); and test certificates for the materials included in protective devices and PPE

[Table 9] <Amended Aug. 7, 2009>

Marks and Marking Methods for the Safety Certification and Self-regulatory Safety Checks for Machinery, Apparatus etc. Subject to Mandatory Safety Certification (referred to in Article 58-6 (1) and 62 of the Act)

1. Marks



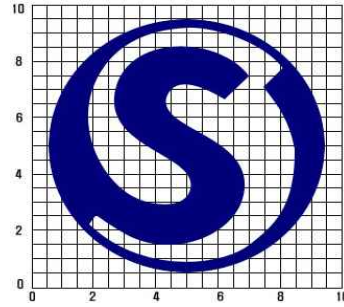
2. Marking methods

- a. The marking shall be made in accordance with the marking standards and methods under Article 15_4 (1) of the Enforcement Decree of the Framework Act on National Standards.
- b. No marking shall be made using any material that is likely to injure the human body or has rough surfaces.

[Table 9-2] <Amended Aug. 7, 2009>

Marks and Marking Methods for the Safety Certification of Machinery, Apparatus etc. Not Subject to
Mandatory Safety Certification
(referred to in Article 58-6 (2) of the Act)

1. Marks



2. Marking methods

- a. The size of the mark may be adjusted according to the size of the applicable machinery, apparatus etc.
- b. Where necessary to elucidate what the mark indicates, textual indications in Korean, English etc. may be added around the mark.
- c. The mark shall be affixed, printed or engraved at an appropriate spot of the applicable machinery, apparatus etc. or the container or packaging thereof.
- d. The mark shall, in principle, use blue for edges and text and white for other parts; provided, however, that white for the edges and text and blue for other parts may be used in consideration of the background color of the safety certification mark. In such case, the color notation of the blue color shall be 2.5PB 4/10, and that of the white color N9.5(The color notations are in accordance with the Korean Industrial Standard for Color Notation Using Three Attributes(KSA 0062; Korean Agency for Technology and Standard Publication No. 2008-0759)).
- e. No marking shall be made using any material that is likely to injure the human body or has rough surfaces.

[Table 9-3] <Added Jan. 26, 2012>

The Standards for Staffing, Facilities and Equipment of Safety Certification Organizations (referred to in Article 59)

1. Common requirements

a. Staffing standards

1) Field relevant to the subject organization

Subject organization	Applicable field
Cranes, lifts, aerial work platforms, presses, shearing machines, injection molding machines, and rollers	Mechanical, electrical, electronic, or occupational safety(or mechanical or electrical safety for professional engineers)
Pressure vessels	Mechanical, electrical, electronic, chemical, metal, energy or occupational safety(or mechanical or chemical safety for professional engineers)
Explosion-proof electrical machinery, apparatus and parts	Mechanical, electrical, electronic, metal, chemical, or gas safety
Falsework	Mechanical, architectural, civil engineering, production management, construction, or occupational safety(or construction or mechanical safety for professional engineers)

* The term "practiced" as set forth in individual requirements shall indicate that the person in question has practiced in the field of research, manufacturing, certification or inspection of the applicable machinery, apparatus or equipment subject to safety certification.

b. Standards for Facilities and Equipment

1) Facility standards

(a) Offices

(b) Equipment storage rooms(which shall be air conditioned, heated and well ventilated)

2) If any item of equipment as set forth in the equipment standards in the individual requirements under subparagraph 2 provides multiple features, the organization shall be deemed to have other applicable items of equipment.

c. The organization, size of staff and operational system used to perform safety certification shall be in compliance with KS A ISO Guide 65(General Requirements for Bodies Operating Product Certification Systems) and KS Q ISO/IEC 17025(General Requirements for the Competence of Testing and Calibration Laboratories).

d. If a safety certification organization is to establish branches, such organization shall consult with the Minister of Employment and Labor.

2. Individual requirements

No.	Item	Staffing standards	Facilities and equipment standards
1	Cranes, lifts, and aerial work platforms	<p>a. One or more of the following persons:</p> <ol style="list-style-type: none"> 1) any person having a professional engineer license under the National Technical Qualifications Act in the applicable field; 2) any person who has acquired a master's degree or higher in the applicable field and then practiced for five years or longer; or 3) any person who has acquired a certified engineer license under the National Technical Qualifications Act and then practiced for seven years or longer <p>b. Two or more of the following persons in each field(six persons or more in total): any person who holds a certified engineer license or better under the National Technical Qualifications Act in the applicable field and has practiced for three years or longer, or any person who holds an associate degree or better in the applicable field and has practiced for seven years or longer (or five years or longer for any person holding a bachelor's degree)</p> <p>c. One or more of the following persons in each field(two persons or more in total): any person who holds an industrial engineer license or better in the field of welding or non-destructive testing and has practiced for three years or longer</p>	<p>○ Cranes, lifts(other than lifts used for residential moving purposes), and aerial work platforms</p> <ol style="list-style-type: none"> 1. Wire rope testers 2. Revolution meters 3. Vibration meters 4. Durometers 5. Load cells(5 tons or more) 6. Weights(0.5 tons or more) 7. Ultrasonic thickness gauges 8. Non-destructive testing equipment(UT, MT) 9. Transits 10. Surface thermometers 11. Insulation resistance meters 12. Clamp meters 13. Multimeters 14. Ground resistance meters 15. Laser distance meters 16. Water level meters <p>* Items as set forth in subparagraphs 1 through 6 may be shared by the main and branch offices.</p> <p>* Items as set forth in subparagraphs 7 through 9 shall be maintained by each branch office</p> <p>* One unit or more of each item as set forth in subparagraphs 10 through 16 shall be maintained for every two product assessment engineers.</p> <p>○ Lifts used for residential moving purposes (mounted on trucks)</p> <ol style="list-style-type: none"> 1. Facility standards <ol style="list-style-type: none"> a. Size of the inspection site: 3,000m² or more b. Tower to be installed: 40m 2. Equipment standards <ol style="list-style-type: none"> a. Ultrasonic thickness gauges b. Insulation resistance meters c. Non-destructive testing equipment(UT, MT)
2	Presses, shearing machines, injection	<p>a. One or more of the following persons:</p> <ol style="list-style-type: none"> 1) any person having a professional engineer license under the 	<ol style="list-style-type: none"> 1. Revolution meters 2. Time measurement devices at Emergency Stop 3. Vibration meters

	molding machines, and rollers	<p>National Technical Qualifications Act in the applicable field;</p> <p>2) any person who has acquired a master's degree or higher in the applicable field and then practiced for five years or longer; or</p> <p>3) any person who has acquired a certified engineer license under the National Technical Qualifications Act and then practiced for seven years or longer</p> <p>b. Two or more of the following persons in each field(six persons or more in total): any person who holds a certified engineer license or better under the National Technical Qualifications Act in the applicable field and has practiced for three years or longer, or any person who holds a bachelor's degree or better in the applicable field and has practiced for five years or longer</p>	<p>4. Durometers</p> <p>5. Non-destructive testing equipment(UT, MT)</p> <p>6. Surface thermometers</p> <p>7. Sound level meters</p> <p>8. Insulation resistance meters</p> <p>9. Clamp meters</p> <p>10. Multimeters</p> <p>11. Ground resistance meters</p> <ul style="list-style-type: none"> * Items as set forth in subparagraphs 1 through 5 may be shared by the main and branch offices. * Items as set forth in subparagraphs 6 and 7 shall be maintained by each branch office * One unit or more of each item as set forth in subparagraphs 8 through 11 shall be maintained for every two product assessment engineers.
3	Pressure vessels	<p>a. One or more of the following persons:</p> <p>1) any person having a professional engineer license under the National Technical Qualifications Act in the applicable field;</p> <p>2) any person who has acquired a master's degree or higher in the applicable field and then practiced for five years or longer; or</p> <p>3) any person who has acquired a certified engineer license under the National Technical Qualifications Act and then practiced for seven years or longer</p> <p>b. One or more of the following persons in each field(six persons or more in total): any person who holds a certified engineer license or better under the National Technical Qualifications Act in the applicable field and has practiced for three years or longer, or any person who holds an associate degree or better in the applicable field and has practiced for seven years or longer (or five years or longer for any person holding a bachelor's degree)</p> <p>c. One or more of the following persons in each field(two persons or more in total): any person who holds an industrial engineer license or better in the field of welding or</p>	<p>1. Water pressure testers</p> <p>2. Leak testing equipment</p> <p>3. Non-destructive testing equipment(UT, MT)</p> <p>4. Standard pressure gauges</p> <p>5. Safety valve testing equipment</p> <p>6. Industrial endoscopes</p> <p>7. Metal microscopes</p> <p>8. Durometers</p> <p>9. Pinhole testers</p> <p>10. Ultrasonic thickness gauges</p> <p>11. Ground resistance meters</p> <p>12. Oxygen indicators</p> <p>13. Gas concentration meters</p> <p>14. Surface thermometers</p> <p>15. Gas leak detectors</p> <p>16. Insulation resistance meters</p> <p>17. Multimeters</p> <ul style="list-style-type: none"> * Items as set forth in subparagraphs 1 through 8 may be shared by the main and branch offices. * The item as set forth in subparagraph 9 may be shared by branch offices. * One unit or more of each item as set forth in subparagraphs 10 through 17 shall be maintained for every two product assessment engineers.

		non-destructive testing and has practiced for three years or longer	
4.	Explosion-proof electrical machinery and apparatus	<p>a. One or more of any person who has acquired a professional engineer license under the National Technical Qualifications Act or a doctoral degree and then practiced for five years or longer</p> <p>b. One person or more meeting each set of the following qualifications or better (four persons or more in total)</p> <p>1) any person holding a professional engineer license or doctoral degree in the applicable field;</p> <p>2) any person who holds an associate degree or better in the applicable field and has practiced for nine years (or seven years for a bachelor's degree or five years for a master's degree) or longer; and</p> <p>3) any person who holds an industrial engineer license or better in the applicable field and has practiced for seven years (or five years for a certified engineer degree) or longer</p>	<p>(1) Facility standards</p> <p>a. Offices</p> <p>b. Laboratory: 220m² or more</p> <p>(2) Equipment standards</p> <p>a. Explosion testing equipment</p> <p>b. Water pressure testers</p> <p>c. Impact testers</p> <p>d. Drawing testers</p> <p>e. High-speed temperature recorders</p> <p>f. Torque testing equipment</p> <p>g. Thermal stability testing equipment</p> <p>h. Spark ignition testers</p> <p>i. Lock testing equipment</p> <p>j. Spray testing equipment</p> <p>k. Dust testing equipment</p> <p>l. Tracking testers</p> <p>m. Internal pressure testers</p> <p>n. Oscilloscopes</p> <p>o. Fading resistance testing equipment</p> <p>p. Static electricity testing equipment</p> <p>q. High-potential voltage testing equipment</p> <p>r. Insulation resistance testing equipment</p> <p>s. Testing device for explosion of ventilation and exhaust line</p> <p>t. Leak testing equipment</p> <p>u. Dynamic pressure sensor calibration equipment</p> <p>v. Experimental test device for maximum safety tolerance or oxygen analyzers</p> <p>w. Portable pressure gauges</p> <p>x. Portable gas meters</p> <p>y. Lamp holder torque testers</p> <p>z. RLC meters</p> <p>aa. Submersion leak testing equipment?</p> <p>bb. Testing device for ventilation restriction</p> <p>cc. Contact pressure testing equipment</p> <p>dd. Water content meters</p> <p>ee. International rubber hardness degree meters</p> <p>* Flame retardancy testing may be contracted out.</p>
5.	Falsework	<p>a. One or more of the following persons:</p> <p>1) any person having a professional</p>	<p>(1) Facility standards</p> <p>a. Verification room (occupying 200m² or more including</p>

		<p>engineer license under the National Technical Qualifications Act in the applicable field;</p> <p>2) any occupational safety consultant (specializing in construction safety or mechanical safety);</p> <p>3) any person who has acquired a master's degree in the applicable field and then practiced for five years(or two years for a doctoral degree) or longer;</p> <p>4) any person who has acquired a certified engineer license under the National Technical Qualifications Act and then practiced for seven years or longer</p> <p>b. One or more of any person who has acquired an industrial engineer license or better under the National Technical Qualifications Act and then practiced for five years(or three years for a certified engineer license) or longer;</p> <p>c. One or more of the following persons:</p> <p>1) any person who holds a bachelor's degree or better in the applicable field;</p> <p>2) any person who holds an associate degree in the applicable field and has practiced for two years or longer; or</p> <p>3) any person who has graduated from an industrial high school under the Elementary and Secondary Education Act (including any other academic qualifications recognized to be equivalent or better under other laws) with a major in or closely related to the applicable field and practiced for four years or longer</p>	<p>equipment rooms)</p> <p>(2)Equipment standards</p> <p>a. Compression testers</p> <p>b. Tensile testers</p> <p>c. Universal material testers</p> <p>d. Drop testers</p> <p>e. Ultrasonic thickness gauges</p> <p>f. Hardness testers</p> <p>g. Torque wrenches</p> <p>h. Micrometers</p> <p>I. Vernier callipers</p>
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[Table 9-4] <Amended Jan. 26, 2012>

Safety Inspection Marking and Marking Methods

(referred to in Articles 73-2 and 73-3)

1. Inspection marking

CERTIFICATE OF SATISFACTORY SAFETY INSPECTION	
① Name of harmful or hazardous machine	
② Applicant	
③ Type no. (symbol) (place of installation)	
④ Issue no.:	
⑤ Inspection effective through	
⑥ Inspection performed by	[name] (official seal) Inspector: : [name]
<div style="display: inline-block; text-align: center;"> Minister of Employment and Labor <div style="border: 2px solid red; padding: 5px; margin-left: 10px; color: red; font-weight: bold;">Seal omitted</div> </div>	

2. Marking methods

- a. ② The applicant shall state the corporate name of the user.
- b. ③ The applicant shall state the type number or symbol specifying the harmful or hazardous machine as inspected and, if necessary, the place of installation as well.
- c. ④ The safety inspection organization shall state a issue number as follows:

□□	—	□□	□□	—	□	—	□□□□
(a) Year of issue		(b) Inspection organization	(c) Region (<i>si</i> and/or <i>do</i>)		(d) Subject item		(e) Serial number

(a) Year of issue: The last two digits of the applicable year
(e.g. 10 for 2010 or 11 for 2011)

(b) Inspection organization code(A, B, C, D...)

(c) Enter a number corresponding to the region(*si* and/or *do*).

Name	No.	Name	No.	Name	No.	Name	No.
Seoul	02	Gwangju	62	Gangwon	33	Gyeongnam	55
Busan	51	Daejeon	42	Chungbuk	43	Jeonbuk	63
Daegu	53	Ulsan	52	Chungnam	41	Jeonnam	61
Incheon	32	Gyeonggi	31	Gyeongbuk	54	Jeju	64

(d) Subject item: Indicate the type of the subject item

No.	Type	Indicator code
1	Presses	A
2	Shearing machines	B
3	Cranes	C
4	Lifts	D
5	Pressure vessels	E
6	Gondola lifts	F
7	Local ventilation devices	G
8	Centrifuges	H
9	Chemical equipment	I
10	Drying equipment	J
11	Rollers	K
12	Injection molding machines	L

(e) Serial number: A four-digit serial number issued by each inspection organization

- d. ⑤ For the effective period, the year, month and date of issuance and the year, month and date of expiry shall be stated.
- e. The inspection marking shall be of rectangular shape with dimensions of 90mm or more in width and 60mm or more in length or of circular shape with a diameter of 70mm or more, which may be adjusted depending on the subject machine etc. if necessary.
- g. The colors may be varied for each year of inspection etc.
- f. The inspection marking shall be affixed or printed on the harmful or hazardous machine etc. in a manner that allows its content to be readily identified and prevents the marking from being rubbed out or removed.

[Table 9-5] <Added Jan. 26, 2012>

The Standards for Staffing, Facilities and Equipment of Safety Inspection Organizations
(referred to in Article 73-4)

1. Common requirements

a. Staffing standards

1) Applicable fields by subject item

Items subject to safety inspection	Applicable field
Cranes, lifts, gondola lifts, presses, shearing machines, injection molding machines, and rollers	Mechanical, electrical, electronic, or occupational safety(or mechanical or electrical safety for professional engineers)
Pressure vessels, chemical equipment, drying equipment and related accessories	Mechanical, electrical, electronic, chemical engineering or occupational safety(or mechanical or chemical engineering safety for professional engineers)
Local ventilation devices	Mechanical, electrical, chemical engineering, occupational safety, or industrial hygiene (or mechanical, chemical engineering, or industrial hygiene for professional engineers)
General safety inspection	Mechanical, electrical, electronic, chemical engineering, occupational safety, or industrial hygiene(or mechanical, electrical, chemical engineering safety, or industrial hygiene for professional engineers)

* The term “practiced” as set forth in individual requirements shall indicate that the person in question has practiced in the field of research, manufacturing, certification or inspection of the applicable machinery, apparatus or equipment subject to safety inspection.

b. Facilities and equipment standards

1) Facility standards

a) Offices

b) Equipment storage rooms(which shall be air conditioned, heated and well ventilated)

2) If any item of equipment as set forth in the equipment standards in the individual requirements under subparagraph 2 provides multiple features, the organization shall be deemed to have other applicable items of equipment.

3) If two or more items of equipment to be shared by the main and branch offices or maintained by each branch office as set forth in the equipment standards in the individual requirements under subparagraph 2 overlap, such items may be shared to the extent that such sharing does not hinder inspection activities.

c. If a safety inspection organization is to establish branches, such organization shall consult with the Minister of Employment and Labor.

2. Individual requirements

No.	Item	Staffing standards	Facilities and equipment standards
1	Cranes, lifts and gondola lifts	<p>a. One or more of the following persons:</p> <ol style="list-style-type: none"> 1) any person having a professional engineer license under the National Technical Qualifications Act in the applicable field; 2) any person who has acquired a master's degree or higher in the applicable field and then practiced for five years or longer; or 3) any person who has acquired a certified engineer license under the National Technical Qualifications Act and then practiced for seven years or longer <p>b. Three or more of the following persons in each field(nine persons or more in total): any person who holds a certified engineer license or better under the National Technical Qualifications Act in the applicable field and has practiced for three years or longer, or any person who holds a bachelor's degree or better in the applicable field and has practiced for five years or longer</p> <p>c. Three or more of the following persons in each field(nine persons or more in total): any person who holds an industrial engineer license or better under the National Technical Qualifications Act in the applicable field and has practiced for five years or longer</p> <p>d. Two or more of the following persons in each field: any person who holds an industrial engineer license or better in the field of welding or non-destructive testing and has practiced for three years or longer</p> <p>e. One more person falling within the scope of item b or c shall be added for every 1,000 annual units inspected per year in excess of 21,000units (If the total number of engineers is two or more, however, then those falling within the scope of item b shall account for one half or more of all.).</p>	<p>○ Cranes, lifts(other than lifts used for residential moving purposes), and gondola lifts</p> <ol style="list-style-type: none"> 1. Wire rope testers 2. Revolution meters 3. Load cells(5 tons or more) 4. Weights(0.5 tons or more) 5. Ultrasonic thickness gauges 6. Non-destructive testing equipment(UT, MT) 7. Transits 8. Insulation resistance meters 9. Clamp meters 10. Multimeters 11. Ground resistance meters 12. Laser distance meters 13. Water level meters <p>* Items as set forth in subparagraphs 1 through 4 may be shared by the main and branch offices.</p> <p>* Items as set forth in subparagraphs 5 through 7 shall be maintained by each branch office.</p> <p>* One unit or more of each item as set forth in subparagraphs 8 through 13 shall be maintained for every two engineers.</p> <p>○ Lifts used for residential moving purposes</p> <ol style="list-style-type: none"> 1. Ultrasonic thickness gauges 2. Insulation resistance meters 3. Non-destructive testing equipment(UT, MT) <p>* On-site inspection services provided</p>
2	Presses,	a. One or more of the following persons:	1. Revolution meters

	shearing machines, injection molding machines, rollers, and centrifuges	<ol style="list-style-type: none"> 1) any person having a professional engineer license under the National Technical Qualifications Act in the applicable field; 2) any person who has acquired a master's degree or higher in the applicable field and then practiced for five years or longer; or 3) any person who has acquired a certified engineer license under the National Technical Qualifications Act and then practiced for seven years or longer <p>b. Three or more of the following persons in each field(nine persons or more in total): any person who holds a certified engineer license or better under the National Technical Qualifications Act in the applicable field and has practiced for three years or longer, or any person who holds a bachelor's degree or better in the applicable field and has practiced for five years or longer</p> <p>c. Three or more of the following persons in each field(nine persons or more in total): any person who holds an industrial engineer license or better under the National Technical Qualifications Act in the applicable field and has practiced for five years or longer</p> <p>d. Two or more of the following persons in each field: any person who holds an industrial engineer license or better in the field of welding or non-destructive testing and has practiced for three years or longer</p> <p>e. One more person falling within the scope of item b or c shall be added for every 1,200 annual units inspected per year in excess of 22,800units (If the total number of engineers is two or more, however, then those falling within the scope of item b shall account for one half or more of all.).</p>	<ol style="list-style-type: none"> 2. Time measurement device at emergency stop 3. Non-destructive testing equipment(UT, MT) 4. Sound level meters 5. Insulation resistance meters 6. Clamp meters 7. Multimeters 8. Ground resistance meters <p>* Items as set forth in subparagraphs 1 through 3 may be shared by the main and branch offices.</p> <p>* Items as set forth in subparagraph 4 shall be maintained by each branch.</p> <p>* One unit or more of each item as set forth in subparagraphs 5 through 8 shall be maintained for every two engineers.</p>
3	Pressure vessels, chemical equipment and related accessories, and drying equipment and related accessories	<p>a. One or more of the following persons:</p> <ol style="list-style-type: none"> 1) any person having a professional engineer license under the National Technical Qualifications Act in the applicable field; 2) any person who has acquired a master's degree or higher in the applicable field and then practiced for five years or longer; or 3) any person who has acquired a certified engineer license under the National Technical Qualifications Act and then practiced for seven years or longer <p>b. Two or more of the following persons in each field(eight persons or more in total): any person who holds a certified engineer license or better under the National Technical Qualifications Act in the applicable field and has practiced for three years or longer, or any person who holds a bachelor's degree or better in the applicable field and has</p>	<ol style="list-style-type: none"> 1. Water pressure testers 2. Leak testing equipment 3. Non-destructive testing equipment(UT, MT) 4. Standard pressure gauges 5. Safety valve testing equipment 6. Industrial endoscopes 7. Ultrasonic thickness gauges 8. Ground resistance meters 9. Oxygen indicators 10. Gas concentration meters 11. Surface thermometers 12. Gas leak detectors 13. Insulation resistance meters

		<p>practiced for five years or longer</p> <p>c. Two or more of the following persons in each field(eight persons or more in total): any person who holds an industrial engineer license or better under the National Technical Qualifications Act in the applicable field and has practiced for five years or longer</p> <p>d. One more person falling within the scope of item b or c shall be added for every 1,200 annual units inspected per year in excess of 22,800units(If the total number of engineers is two or more, however, then those falling within the scope of item b shall account for one half or more of all.).</p>	<p>14. Multimeters</p> <p>* Items as set forth in subparagraphs 1 through 6 may be shared by the main and branch offices.</p> <p>* One unit or more of each item as set forth in subparagraphs 7 through 14 shall be maintained for every two engineers.</p>
4	Local ventilation devices	<p>a. One or more of the following persons:</p> <ol style="list-style-type: none"> 1) any person having a professional engineer license under the National Technical Qualifications Act in the applicable field; 2) any person who has acquired a master's degree or higher in the applicable field and then practiced for five years or longer; or 3) any person who has acquired a certified engineer license under the National Technical Qualifications Act and then practiced for seven years or longer <p>b. Two or more of the following persons: any person who holds a certified engineer license or better under the National Technical Qualifications Act in the applicable field and has practiced for three years or longer, or any person who holds a bachelor's degree or better in the applicable field and has practiced for five years or longer</p> <p>c. Two or more of any person who holds an industrial engineer license or better under the National Technical Qualifications Act in the applicable field and has practiced for five years or longer</p> <p>e. One more person falling within the scope of item b or c shall be added for every 1,000 annual units inspected per year in excess of 5,000units(If the total number of engineers is two or more, however, then those falling within the scope of item b shall account for one half or more of all.).</p>	<ol style="list-style-type: none"> 1. Smoke testers 2. Sound locators or rods 3. Insulation resistance meters 4. Surface thermometers and internal temperature sensors 5. Hot-wire anemometers 6. Revolution meters 7. Multimeters 8. Ground resistance meters 9. Clamp meters <p>* One unit or more of each item as set forth in subparagraphs 1 through 9 shall be maintained for every two engineers.</p>
5	General safety inspection organization	<p>a. One or more of the following persons:</p> <ol style="list-style-type: none"> 1) any person having a professional engineer license under the National Technical Qualifications Act in the applicable field; 2) any person who has acquired a master's degree or higher in the applicable field and then practiced for five years or longer; or 3) any person who has acquired a certified engineer license under the National Technical Qualifications Act and then 	<p>Items as set forth in subparagraphs 1 through 4</p>

		<p>practiced for seven years or longer</p> <p>b. Inspection engineers falling within the scope of subparagraphs 1 a through 1 d, 2 a through 2 c, 3 a through 3 c, and 4 a through c</p> <p>c. One of the following persons shall be added for every 1,200 annual units inspected per year in excess of 72,300units, excluding any local ventilation devices (If the total number of engineers is two or more, however, then those falling within the scope of 1) shall account for one half or more of all.):</p> <p>1) any person who holds a certified engineer license or better in the field of occupational safety, mechanical, electrical (or electronic), or chemical engineering and has practiced for three years or longer, or any person who holds a bachelor's degree or better in the applicable field and has practiced for five years or longer; or</p> <p>2) any person who holds an industrial engineer license or better in the field of occupational safety, mechanical, electrical (or electronic), or chemical engineering and has practiced for five years or longer</p> <p>d. One of the following persons shall be added for every 1,000 annual units inspected per year in excess of 5,000units of local ventilation devices (If the total number of engineers is two or more, however, then those falling within the scope of 1) shall account for one half or more of all.):</p> <p>1) any person who holds a certified engineer license or better in the field of occupational safety, mechanical, electrical, chemical engineering, or industrial hygiene and has practiced for three years or longer, or any person who holds a bachelor's degree or better and has practiced in the field of research, manufacturing, certification or inspection of the applicable machinery, apparatus or equipment for five years or longer; or</p> <p>2) any person who holds an industrial engineer license or better in the field of occupational safety, mechanical, electrical, chemical engineering or industrial hygiene and has practiced for five years or longer</p>	
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[Table 10] <Amended Aug. 7, 2009>

The Standards for Staffing, Facilities and Equipment of Designated Inspection Organizations (referred to in Article 75)

No.	Classification	Staffing standards	
1	Common requirements	<p>One inspection supervisor having the qualifications as set forth in any of the following items:</p> <ul style="list-style-type: none"> a. any person who has acquired a professional engineer license or higher under the National Technical Qualifications Act in the field of equipment management or safety management for the applicable machinery, apparatus or equipment, or any consultant under Article 52-2 of the Act(excluding the construction field); or b. any person who has acquired a certified engineer license under the National Technical Qualifications Act in the field of equipment management or safety management for the applicable machinery, apparatus or equipment and has practiced in the field of research, manufacturing, or inspection of the applicable machinery, apparatus or equipment for ten years or longer(or seven years or longer for any person holding a master's degree) 	Offices (including equipment rooms) occupying 60 square meters or more
2	Designated general inspection organization	<p>One person or more falling within the scope of each of items a through c, two persons or more falling within the scope of item d, and one person or more falling within the scope of each of items e and f:</p> <ul style="list-style-type: none"> a. any person who has acquired a certified engineer license or higher under the National Technical Qualifications Act in the field of equipment management or safety management for the applicable machinery, apparatus or equipment and has practiced and performed duties of inspecting or handling the applicable machinery, apparatus or equipment for five years or longer(or seven years or longer for any industrial engineer); b. any person who has majored in occupational safety, or mechanical, electrical, electronic or chemical engineering, or industrial hygiene, occupational health, or environmental engineering at a four-year school or higher under the Higher Education Act and performed duties of handling the applicable machinery or apparatus for five years or longer; c. any person who has majored in occupational safety, or mechanical, electrical, electronic or chemical 	<ol style="list-style-type: none"> 1. Revolution meters 2. Non-destructive testing equipment (UT, MT, PT) 3. Wire rope testers 4. Standard pressure gauges 5. Sound level meters 6. Ground resistance meters 7. Vibration meters 8. Insulation resistance meters 9. Static charge meters 10. Time measurement device at emergency stop for presses. 11. Multimeters 12. Water pressure testers 13. Load cells or weights 14. Dust monitors 15. Anemometers 16. Pitch, aperture and round gauges, vernier calipers, and micrometers 17. Water level meters

		<p>engineering, or industrial hygiene, occupational health, or environmental engineering at any school under the Higher Education Act other than as set forth in item b or at any other school equivalent thereto or higher and performed duties of handling the applicable machinery or apparatus for seven years or longer;</p> <p>d. any person who has graduated from a high school with a major in mechanical, electrical, electronic or chemical engineering or acquired a craftsman license or higher under the National Technical Qualifications Act in the field of equipment management or safety management for the applicable machinery, apparatus or equipment, and has performed duties of handling the applicable machinery or apparatus for nine years or longer, or any person who has completed an inspector training course under Article 43 of these Regulations and practiced in the applicable field for three years or longer;</p> <p>e. any person who has acquired a craftsman license or higher in the field of non-destructive testing and then practiced for three years or longer; or</p> <p>f. any person holding an elevator craftsman license</p>	<p>18. Inspection tool sets</p> <p>19. Line speed meters</p> <p>20. Gas concentration meters</p> <p>21. Leak testing equipment</p> <p>22. Safety valve testing equipment</p> <p>23. Industrial endoscopes</p> <p>24. Lux meters</p> <p>25. Gas detectors</p> <p>26. Ultrasonic thickness gauges</p> <p>27. Smoke testers</p> <p>28. Sound locators or rods</p> <p>29. Surface thermometers or glass thermometers</p> <p>30. Hot-wire anemometers with static pressure probes</p> <p>31. Combustion analyzers</p> <p>32. Pitot tubes</p> <p>33. Water column manometers</p> <p>34. Tape measures</p>
3	Machinery field(limited to harmful or hazardous machinery etc. as set forth in subparagraphs 1 through 4, 6, 8, 11 and 12 of Article 28-3(1) of the Decree)	One person or more meeting the requirements as set forth in each of items a, b and d through f of the staffing standards for a designated general inspection organization	All items of equipment required for a designated general inspection organization other than such items as set forth in subparagraphs 4, 12, 14, 20, 21 through 23, 25, and 27 through 31 of the facilities and equipment standards (excluding, however, non-destructing ultrasonic testing equipment)
4	Device and equipment field(limited to harmful or hazardous machinery etc. as set forth in subparagraphs	One person or more falling within the scope of each of items a and b, two persons or more falling within the scope of item d, and one person or more falling within the scope of item e of the staffing standards for a designated general inspection organization	All items of equipment required for a designated general inspection organization other than such items as set forth in subparagraphs 1, 3, 7, 10, 13, and 27 through 30 of the facilities and

	5, 9 and 10 of Article 28-3 (5) of the Decree)		equipment standards
5	Local ventilation devices	One person or more meeting the requirements as set forth in each of items c and d of the staffing standards for a designated general inspection organization	<ol style="list-style-type: none"> 1. Smoke testers 2. Sound locators or rods 3. Insulation resistance meters 4. Surface thermometers or glass thermometers 5. Hot-wire anemometers with static pressure probes 6. Revolution meters

[Table 10-2] <Amended Aug. 7, 2009>

Eligibility Requirements for Support for Manufacturers of Protective Devices etc. (referred to in Article 77)

1. The eligible manufacturer of protective devices or PPE shall have not had its safety certification revoked under Article 34-3 (1) 1 of the Act within a two-year period immediately following the date of application for registration, received the cut-off marks or better in the technical capability and production system assessment, and be in compliance with its own technical capability and production system.
2. Local or general ventilation device contractors

Staffing	Facilities and equipment	
	Offices	Equipment
a. One or more of industrial hygiene consultants, professional industrial hygiene engineers, and professional air pollution control engineers	50 square meters	Industrial ventilation facility performance testing equipment
b. One or more of certified industrial hygiene engineers and certified air environmental engineers		a. Smoke testers
c. Persons as set forth in two or more of items 1) through 3):		b. Hot-wire anemometers with static pressure probes
		c. Sound locators or rods
		d. Insulation resistance meters
		e. Surface thermometers
		f. Revolution meters
1) one or more of certified engineers in the field of general, precision or construction machinery or process design;		
2) one or more of certified engineers in the field of chemical engineering or industrial chemistry; and		
3) one or more of certified electrical or electrical construction engineers or master electrical device or electrical construction craftsmen		

* Notes:

- a. In the staffing standards, any industrial hygiene consultant or any professional industrial hygiene engineer may be substituted with any person holding a doctoral degree in industrial hygiene or any person who has acquired a certified industrial hygiene engineer license and then practiced for five years or longer in the applicable field. Likewise, any professional air pollution control engineer may be substituted with any professional engineer specializing in chemical devices and equipment, chemical plant design, fluid machinery, or air conditioning and refrigerating machinery, any person holding a doctoral degree in environmental engineering, or any person who has acquired a certified air pollution control engineer license and then practiced for five years or longer in the applicable field.
- b. In the staffing standards, any person holding a professional air pollution control engineer license shall also hold a certified industrial hygiene engineer license.
- c. Any certified engineer may be substituted with any person who has acquired an industrial engineer in the applicable field and then practiced for four years or longer in the same field.

3. Noise and vibration control equipment contractor

Staffing	Facilities and equipment	
	Offices	Equipment
a. One or more of industrial hygiene consultants, professional industrial hygiene engineers, and professional noise and vibration control engineers b. One or more of certified industrial hygiene engineers and certified noise and vibration control engineers c. Persons as set forth in two or more of the following items: 1) one certified general mechanical engineer or more; 2) one certified architectural engineer or more; 3) one certified civil engineer or more; and 4) one or more of certified electrical or electrical construction engineers or master electrical device or electrical construction craftsmen	50 square meters	a. Sound level meters (capable of frequency analysis) b. Noise dosimeters: 2 units or more

* Notes:

- a. In the staffing standards, an industrial hygiene consultant or a professional industrial hygiene engineer may be substituted with any person holding a doctoral degree in industrial hygiene or any person who has acquired a certified industrial hygiene engineer license and then practiced for five years or longer in the applicable field. Likewise, any professional noise and vibration control engineer may be substituted with any professional engineer specializing in machinery manufacturing or electronic applications, any person holding a doctoral degree in environmental engineering, or any person who has acquired a certified noise and vibration control engineer license and then practiced for five years or longer in the applicable field.
- b. In the staffing standards, any person holding a professional noise and vibration control engineer license shall also hold a certified industrial hygiene engineer license.
- c. Any certified engineer may be substituted with any person who has acquired an industrial engineer in the applicable field and then practiced for four years or longer in the same field.
- d. Any person operating as a local or general ventilation device contractor and a noise and vibration control equipment contractor at the same time may have the common technical personnel, facilities and equipment shared by such two contractors.

[Table 10-3] <Amended July 12, 2010>

The Standards for Staffing, Facilities and Equipment of Asbestos Surveyors
(referred to in Article 80-3)

1. Staffing standards

- a. One or more of any person who holds any of the following sets of qualifications and has completed a training course in the identification of asbestos products, the collection and analysis of asbestos samples, etc. as prescribed and published by the Minister of Employment and Labor (herein after referred to as an "asbestos surveyor training course"):
 - 1) any person who holds a certified engineer license or higher in the field of industrial hygiene or air pollution control; or
 - 2) any person who is an industrial engineer specializing in industrial hygiene management or air pollution control and has practiced for two years or longer.
- b. One or more of any person who has graduated from an industrial high school under the Elementary and Secondary Education Act or any other school equivalent thereto or higher or practiced for two years or longer in the field of occupational health (hygiene) or environmental health (hygiene), and completed an asbestos surveyor training course
- c. One or more of any person who has majored in occupational health (hygiene), environmental health (hygiene), environmental engineering, hygiene engineering, pharmaceutical science, chemistry, chemical engineering or any other major closely related to chemistry at any college under the provisions of Articles 2 (1) through 2 (6) of the Higher Education Act or any other school equivalent thereto or higher

2. Facility standards: Analysis rooms and survey preparation rooms

3. Equipment standards

- a. Local sampling pumps
- b. Flow calibrators
- c. Stereoscopic microscopes
- d. Polarizing microscopes
- e. Phase microscopes
- f. Fume hoods (with high-efficiency particulate arresting (HEPA) filters or any other better air filters)
- g. Vacuum cleaners (with high-efficiency particulate arresting (HEPA) filters or any other better air filters)
- h. Acetone vaporizers
- i. Electric furnaces (capable of reaching 600°C or higher)
- j. Filtration extractors
- k. Scales (capable of measuring 0.1 milligram or less)

* Note:

If the applicable organization intends to obtain or has obtained designation as a

designated monitoring service provider under Article 96, a special medical examination provider under Article 103 or a safety and health surveyor under Article 128, and maintains any facilities as set forth in subparagraph 2 or any items of equipment other than as set forth in subparagraphs 3 a and 3 b, then such facilities or items of equipment may be shared in consideration of analysis capability etc. In such case, the facilities and items of equipment that may be shared shall be counted toward the requirements of the necessary standard.

[Table 10-4] <Amended July 12, 2010>

The Standards for Staffing, Facilities and Equipment of Asbestos Disposal And Removal Service Providers(referred to in Article 80-5)

1. Staffing standards

- a. One or more of any person who holds a construction technician license in the civil engineering or architectural field of under the Construction Technology Management Act or technical qualifications in the applicable field under the National Technical Qualifications Act and has completed a training course in the method for disposing or removing asbestos, using PPE, etc. as prescribed and published by the Minister of Employment and Labor (hereinafter referred to as an "asbestos disposal and removal manager training course")
- b. any person who has graduated from an industrial high school under the Elementary and Secondary Education Act or any other school equivalent thereto or higher or practiced for two years or longer in the civil engineering or architectural field, and completed an asbestos disposal and removal manager training course

2. Facility standards: Offices

3. Equipment standards

- a. Negative pressure machines with high-efficiency particulate arresting(HEPA) filters
- b. Negative pressure recorders
- c. Vacuum cleaners with high-efficiency particulate arresting(HEPA) filters
- d. Hygiene facilities(facilities with locker rooms, shower rooms and change rooms)
- e. Air-fed masks or powered dust respirators(P3 full-face respirators only) or powered dust hoods and powered face shields(limited to those using P3 filters suitable against dust/mist/fume whose leak rate in facial areas is 0.05% or less)
- f. Humidifiers

[Table 11-2] <Amended Mar. 3, 2011>

Classification Standards for Harmful Agents

(referred to in Article 81-1)

1. Classification criteria for chemicals

a. Classification criteria by physical hazard

- 1) Explosive substances: any solids, liquid or mixture generating gas that has the temperature, pressure and speed capable of damaging its surrounding environment due to its own chemical reaction
- 2) Flammable gas: any gas(including mixtures) that is in the extent of being mixed with air and ignited at 20℃ and the standard temperature(101.3kPa)
- 3) Flammable liquid: any liquid whose flash point is 60 ℃ or lower at the standard temperature(101.3kPa)
- 4) Flammable solid: any substance that is easily combustible or causing or accelerating fire due to friction
- 5) Flammable aerosol: any aerosol containing flammable gas, flammable liquid, flammable solid or any other flammable content(excluding any pyrophoric, self heating, or water reactive substances)
- 6) Water reactive substance: any solid, liquid or mixture that interacts with water and spontaneously ignites or generates flammable gas
- 7) Oxidizing gas: any gas that causes or contributes to the combustion of other substances better than air by generally providing oxygen
- 8) Oxidizing liquid: any liquid that does not burn on tis own but causes or contributes to the combustion of other substances by generally generating oxygen
- 9) Oxidizing solid: any solid that does not burn on tis own but causes or contributes to the combustion of other substances by generally generating oxygen
- 10) Compressed gas: any gas that is filled within a container at 20 ℃ and 200kPa or more or filled within a container in the form of frozen liquid gas(classified into pressurized gas, liquid gas, frozen liquid gas, and dissolved gas)
- 11) Self-reactive substance: any thermally unstable liquid, solid or mixture liable to undergo a strongly exothermic decomposition even without participation of oxygen
- 12) Pyrophoric liquid: any liquid, that, even in small quantities, is liable to ignite within five minutes after coming into contact with air
- 13) Pyrophoric solid: any solid, that, even in small quantities, is liable to ignite within five minutes after coming into contact with air
- 14) Self-heating substance: any substance that, by reaction with air and without energy supply, is liable to self-heat(excluding pyrophoric substances)
- 15) Organic peroxide: any liquid or solid organic compound with the bivalent -o-o-

structure that contains a derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical

- 16) Substance corrosive to metal: any substance that will damage or corrode metals by chemical action

b. Classification criteria by health and environment hazard

- 1) Acutely toxic substance: any substance that has a harmful impact if administered orally or through the skin once or in a number of doses within twenty four hours or inhaled through the respiratory system over four hours
- 2) Skin corrosive or irritant: any substance that destroys or irritates skin tissue when contacted (classified into skin corrosives and skin irritants)
- 3) Substance seriously damaging to the eye or eye irritant: any substance that produces tissue damage in the eye or serious physical decay of vision (classified into substances seriously damaging to the eye and eye irritants)
- 4) Respiratory sensitizer: any substance that induces hypersensitivity of the airways following inhalation of the substance
- 5) Skin sensitizer: any substance that induces an allergic response following skin contact
- 6) Carcinogen: any substance that induces cancer or increase its incidence
- 7) Germ-cell mutagen: any substance giving rise to an increased occurrence of inheritable mutations in germ cells
- 8) Reproductive toxin: any substance that affects reproductive ability or capacity or development or growth of fetuses
- 9) Target organ/systemic toxicant(single exposure): any substance that is toxic to a particular target organ or the whole body following a single exposure
- 10) Target organ/systemic toxicant(repeat exposure): any substance that is toxic to a particular target organ or the whole body following repeated exposures
- 11) Aspiration hazard: any liquid or solid chemical product that enters the trachea and lower respiratory system directly through the oral or nasal cavity, or indirectly from vomiting, and produces severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death
- 12) Hazard to the aquatic environment: any substance that is harmful to aquatic life following short-term or prolonged exposure

2. Classification criteria for physical agents

- a. Noise: any loud sound at or above 85dB that may induce noise-induced hearing loss
- b. Vibration: local vibration that is generated by the use of rock drills or other hand-held pneumatic tools and induces vibration white finger, Raynaud's phenomenon, peripheral circulatory disturbance; and whole body vibration that is generated by the use of motor vehicles etc. and induces arthralgia, spinal disc herniation, digestive disturbance etc.
- c. Radioactive rays: particle beams such as alpha rays, beta rays, gamma rays, X-rays, proton beams that are capable of directly or indirectly ionizing air or cells

- d. Abnormal atmospheric pressure: any atmospheric pressure level where the gauge pressure is above 1 kilogram per square centimeter or below negative 1 kilogram per square centimeter
 - e. Abnormal temperature: any temperature that may induce heatstroke, frostbite, cutaneous conditions etc. due to intense heat, coldness or high humidity
3. Classification criteria for biological agents
- a. Bloodborne pathogen: any infectious agent such as human immunodeficiency virus, hepatitis B and C viruses, and syphilis virus that causes disease through contamination by blood
 - b. Airborne infectious agent: any infectious agent such as tuberculosis mycobacteria, chickenpox virus and measles virus that is through the air, droplets etc. into the respiratory system
 - c. Insect and animal borne pathogen: any infectious agent such as orientia tsutsugamushi, leptospira bacteria and hantavirus that is transmitted through animal feces or any infectious agent such as anthrax bacteria, brucellosis bacteria that is transmitted from livestock or wild animals to humans

* Note:

With respect to the classification criteria for chemicals as set forth in subparagraph 1, the Minister of Employment and Labor shall prescribe and publish: subcategories for the classification criteria by physical hazard as set forth in item a; and subcategories for the non-mixtures and mixtures in the classification criteria by health and environment hazard as set forth in item b.

[Table 11-3] <Amended Aug. 7, 2009>

Standards for the Permissible Exposure Limits of for Harmful Agents
(referred to in Article 81-4)

Harmful agent		PEL			
		Time-weighted average (TWA)		Short-term exposure limit(STEL)	
		ppm	mg/m ³	ppm	mg/m ³
1. Lead and its inorganic compounds			0.05		
2. Nickel (insoluble inorganic compounds)			0.5		
3. Dimethylformamide		10	30		
4. Benzene		1	3		
5. 2-bromopropane		1	5		
6. Asbestos			0.1 body/cm ³		
7. Cr(VI) compounds	Insoluble		0.01		
	Water soluble		0.05		
8. Carbon disulfide		10	30		
9. Cadmium and its compounds			0.03		
10. Toluene-2, 4-diisocyanate		0.005	0.04	0.02	0.15
11. Trichloroethylene		50	270	200	1,080
12. Formaldehyde		0.5	0.75	1	1.5
13. N-hexane		50	180		

* Notes:

1. The “time-weighted average” (TWA) refers to the average exposure concentration assuming eight hours of work per day and is calculated as follows:

$$TWA = \frac{C_1 \cdot T_1 + C_2 \cdot T_2 + \dots + C_n \cdot T_n}{8}$$

Where) C: the average measured concentration of the harmful agent
(in ppm, mg/m³, or body/cm³)

T: Time period over which the harmful agent is generated (in hours)

2. The “short-term exposure limit” (STEL) refers to the TWA over a fifteen-minute period, where if the exposure concentration is more than the TWA but less than the STEL,
 - (i) the duration of a single exposure shall be less than 15 minutes;
 - (ii) such state shall occur no more than 4 times a day; and
 - (iii) the interval between any two occurrences shall be 60 minutes or more.

[Table 11-4] <Amended July 12, 2010>

Harmful Agents Subject to Work Environment Monitoring

(Article 93 (1))

1. Chemical agents

a. Organic compounds(113)

- 1) Glutaraldehyde
- 2) Nitroglycerin
- 3) Nitromethane
- 4) Nitrobenzene
- 5) p-Nitroaniline (p-aminonitrobenzene)
- 6) p-Nitrochlorobenzene
- 7) Dinitrotoluene
- 8) Dimethylaniline, N,N-dimethylaniline
- 9) Dimethylamine
- 10) N,N-dimethylacetamide
- 11) Dimethylformamide
- 12) Diethanolamine
- 13) Diethylene triamine
- 14) 2-diethylaminoethanol
- 15) Diethyl ether
- 16) Diethylamine
- 17) 1,4-dioxane, diethyl dioxide
- 18) Diisobutylketone
- 19) Dichloromethane
- 20) o-dichlorobenzene
- 21) 1,2-dichloroethylene
- 22) Dichlorofluoromethane
- 23) 1,1-dichloro-1-fluoroethane
- 24) Dihydrobenzene
- 25) 2-methoxyethanol: ethylene glycol monoethers(EGME)
- 26) 4,4'-bethylene di(bis)phenyl diisocyanate
- 27) Methyl amine
- 28) Methyl alcohol
- 29) Methyl ethyl ketone
- 30) Methyl isobutyl ketone
- 31) Methyl chloride
- 32) Methyl n-butyl ketone
- 33) Methyl n-amyl ketone

- 34) o-methyl cyclohexanone
- 35) Methyl cyclohexanol
- 36) Methyl chloroform
- 37) Maleic anhydride
- 38) Phthalic anhydride
- 39) Benzene
- 40) 1,3-butadiene
- 41) sec-butyl alcohol
- 42) n-butyl alcohol
- 43) 1-bromopropane
- 44) 2-bromopropane
- 45) Methyl bromide
- 46) Vinyl acetate
- 47) Carbon tetrachloride
- 48) Styrene
- 49) Cyclohexanone
- 50) Cyclohexanol
- 51) Cyclohexane
- 52) Cyclohexene
- 53) Aniline & homologues
- 54) Acetonitrile
- 55) Acetone
- 56) Acetaldehyde
- 57) Acrylonitrile
- 58) Acrylamide
- 59) Allylglycidylether
- 60) Ethanolamine
- 61) Ethylbenzene
- 62) Ethylamine
- 63) Ethyl acrylate
- 64) Ethylene glycol dinitrate
- 65) 2-methoxyethyl acetate, EGMEA
- 66) 2-ethoxy ethanol, EGEE
- 67) 2-ethoxyethylacetate, EGEEA
- 68) 2-butoxyethanol, EGBE
- 69) Ethylene glycol mono butyl acetate
- 70) Ethylene glycol
- 71) Ethylene chlorohydrin

- 72) Ethyleneimine
- 73) 2,3-epoxy-1-propanol
- 74) 1,2-epoxypropane
- 75) Epichlorohydrin
- 76) Methyl iodide
- 77) Isobutyl alcohol
- 78) Isoamyl alcohol
- 79) Isopropyl alcohol
- 80) Ethylene dichloride
- 81) Carbon disulfide
- 82) Methyl acetate
- 83) n-butyl acetate
- 84) Ethyl acetate
- 85) n-Propyl acetate
- 86) Isobutyl acetate
- 87) Isopropyl acetate
- 88) Isoamyl acetate
- 89) Cresol, all isomers
- 90) Xylene, o,m,p-isomers
- 91) Chlorobenzene
- 92) 1,1,2,2-tetrachloroethane (tetrachloroacetylene)
- 93) 1,1,2-trichloroethane
- 94) 1,2,3-trichloropropane
- 95) Tetrahydrofuran
- 96) Toluene
- 97) Toluene-2,4-diisocyanate
- 98) Toluene-2,6-diisocyanate
- 99) Triethylamine
- 100) Trichloromethane
- 101) Trichloroethylene
- 102) Perchloroethylene
- 103) Phenol
- 104) Pentachlorophenol
- 105) Formaldehyde
- 106) Stoddard solvent
- 107) Propylene imine
- 108) Pyridine
- 109) Hydrazine

- 110) Hexamethylene diisocyanate
- 111) Hexane (n-hexane)
- 112) Heptane (n-heptane)
- 113) Dimethyl sulfate
- 114) Formulations containing 1 percent or more by weight of any of the substances as set forth in items 1) through 113)

b. Metals(23)

- 1) Copper
 - a) Fume
 - b) Dusts and Mists, as Cu
- 2) Lead and inorganic compounds, as Pb
- 3) Nickel, as Ni
 - a) Element
 - b) Soluble inorganic compounds
 - c) Insoluble inorganic compounds
 - d) Nickel carbonyl
- 4) Manganese and inorganic compounds, as Mn
- 5) Barium and soluble compounds, as Ba
- 6) Platinum
 - a) Metal
 - b) Soluble salts
- 7) Magnesium oxide
- 8) Selenium and compounds, as Se
- 9) Mercury, as Hg
 - a) Alkyl compounds
 - b) Aryl compounds
 - c) Element and inorganic forms
- 10) Zinc oxide
 - a) Fume
 - b) Dust
- 11) Antimony and compounds, as Sb
- 12) Aluminum and compounds, as Al
 - a) Metal Dust
 - b) Pyro powders
 - c) Fume
 - d) Soluble salts
 - e) Alkyl, NOS

- 13) Iodine
 - 14) Silver
 - a) Metal
 - b) Soluble compounds, as Ag
 - 15) Titanium dioxide
 - 16) Tin, as Sn
 - a) Metal
 - b) Oxide & inorganic compounds, except tin hydride
 - c) Organic compounds
 - 17) Zirconium and compounds, as Zr
 - 18) Iron oxide dust and fume, as Fe
 - 19) Cadmium and compounds, Cd
 - 20) Cobalt and inorganic compounds, as Co
 - 21) Chromium and inorganic compounds, as Cr
 - a) Metal and Cr III compounds
 - b) Water soluble Cr VI compounds
 - c) Insoluble Cr VI compounds
 - 22) Tungsten, as W
 - a) Metal and insoluble compounds
 - b) Soluble compounds
 - 23) Vanadium pentoxide
 - a) Dust and fume
 - 24) Formulations containing 1 percent or more by weight of any of the substances as set forth in items 1) through 23)
- c. Acids and bases (17)
- 1) Formic acid
 - 2) Hydrogen peroxide
 - 3) Acetic anhydride
 - 4) Hydrogen fluoride
 - 5) Hydrogen bromide
 - 6) Sodium hydroxide
 - 7) Potassium hydroxide
 - 8) Sodium cyanide
 - 9) Potassium cyanide
 - 10) Calcium cyanide
 - 11) Acrylic acid
 - 12) Hydrogen chloride

- 13) Phosphoric acid
 - 14) Nitric acid
 - 15) Acetic acid
 - 16) Trichloro acetic acid
 - 17) Sulfuric acid
 - 18) Formulations containing 1 percent or more by weight of any of the substances as set forth in items 1) through 17)
- d. Gaseous materials(15)
- 1) Fluorine
 - 2) Bromine
 - 3) Ethylene oxide
 - 4) Arsine
 - 5) Hydrogen cyanide
 - 6) Ammonia
 - 7) Chlorine
 - 8) Ozone
 - 9) Sulfur dioxide
 - 10) Nitrogen dioxide
 - 11) Nitric oxide
 - 12) Carbon monoxide
 - 13) Phosgene
 - 14) Phosphine
 - 15) Hydrogen sulfide
 - 16) Formulations containing 1 percent or more by weight of any of the substances as set forth in items 1) through 15)
- e. Substances requiring permits under Article 30 of the Decree(14)
- 1) Dichlorobenzidine and its salts
 - 2) α -naphthylamine and its salts
 - 3) Zinc chromate, as Cr
 - 4) O-tolidine and its salts
 - 5) Dianisidine and its salts
 - 6) Beryllium & compounds
 - 7) Arsenic and inorganic compounds, as As
 - 8) chromate, as Cr]
 - 9) Coal tar pitch volatiles, as benzene soluble aerosol
 - 10) Nickel subsulfide, as Ni
 - 11) Vinyl chloride

- 12) Benzotrichloride
- 13) Asbestos, chrysotile
- 14) Formulations containing 1 percent or more by weight of any of the substances as set forth in items 1) through 11) and 13)
- 15) Formulations containing 0.5 percent or more by weight of the substance as set forth in item 12)
- f. Metal working fluid (1)
- 2. Physical agents (2)
 - a. Noise having an 8-hours TWA of 80dB or more
 - b. Intense heat under Chapter VII of the Health Regulations
- 3. Dusts (6)
 - a. Mineral dust
 - 1) Silica
 - a) Quartz
 - b) Cristobalite
 - c) Trydimite
 - 2) Silicates, less than 1% crystalline silica
 - a) Mica
 - b) Potland cement
 - c) Soap stone
 - d) Talc, non-asbestiform
 - e) Graphite
 - 3) Particulates
 - b. Grain dust
 - c. Cotton dust
 - d. Wood dust
 - 1) Soft wood
 - 2) Hard wood
 - e. Welding fume
 - f. Glass fiber dust
- 4. any other harmful agents as prescribed and published by the Minister of Employment and Labor

[Table 12] <Amended Aug. 7, 2009>

The Standards for Staffing, Facilities and Equipment of Designated Monitoring Service Providers by

Type

(referred to in Article 95)

1. Contracted monitoring service provider

a. Staffing standards

- 1) Where the total number of workplaces to be monitored is less than 240, among which the number of workplaces employing 5 workers or more is less than 120
 - a) One or more of industrial hygiene consultants or professional industrial hygiene engineers
 - b) One or more of dedicated analysts (any person who has majored in occupational health (hygiene), environmental health (hygiene), environmental engineering, hygiene engineering, pharmaceutical science, chemistry, chemical engineering or any other major closely related to chemistry at any college or any other school equivalent thereto or higher and completed three credits of analytical chemistry (experiment))
 - c) One or more industrial engineers specializing in industrial hygiene management or higher
- 2) Where the total number of workplaces to be monitored is less than 480, among which the number of workplaces employing 5 workers or more is less than 240
 - a) One or more of industrial hygiene consultants or professional industrial hygiene engineers
 - b) One or more of dedicated analysts (any person who has majored in occupational health (hygiene), environmental health (hygiene), environmental engineering, hygiene engineering, pharmaceutical science, chemistry, chemical engineering or any other major closely related to chemistry at any college or any other school equivalent thereto or higher and completed three credits of analytical chemistry (experiment))
 - c) One or more certified engineers specializing in industrial hygiene management or higher
 - d) Two or more industrial engineers specializing in industrial hygiene management or higher
- 3) Where the total number of workplaces to be monitored is less than 720, among which the number of workplaces employing 5 workers or more is less than 360
 - a) One or more of industrial hygiene consultants or professional industrial hygiene engineers
 - b) Two or more of dedicated analysts (any person who has majored in occupational health (hygiene), environmental health (hygiene), environmental engineering, hygiene engineering, pharmaceutical science, chemistry, chemical engineering or any other major closely related to chemistry at any college or any other school equivalent thereto or higher and completed three credits of analytical chemistry (experiment))

- c) One or more certified engineers specializing in industrial hygiene management or higher
 - d) Three or more industrial engineers specializing in industrial hygiene management or higher
- 4) If the number of workplaces, employing 5 or more ongoing workers, to be monitored is 360 or more, one or more of industrial engineers specializing in industrial hygiene management or higher shall be added to the staffing standard as set forth in 3) for every additional 60 workplaces.
- b. Facility standards
 - Work environment monitoring preparation rooms and analysis labs
- c. Equipment standards
 - 1) Personal sets of samplers used to sample chemical agents and dusts
 - 2) Photoelectric spectrophotometers
 - 3) Sets of detectors and gas and steam meters
 - 4) Scales(capable of measuring 0.01milligram or less)
 - 5) Sound level meters(capable of noise dosimetry)
 - 6) Dryers and desiccators
 - 7) Water purification unit(for secondary distillation), draft chambers, and testing bench for chemical
 - 8) Devices capable of measuring air temperature, humidity and current, intense heat, illuminance etc.
 - 9) Oxygen indicators
 - 10) Gas chromatography(GC)
 - 11) Atomic absorption spectrosopes(AAS) or inductively coupled plasma(ICP)
 - 12) Equipment for testing the performance of local ventilation facilities: Smoke testers, sound locators or rods, insulation resistance testers, surface thermometers or glass thermometers, hot-wire anemometers with static pressure probes, revolution meters, or any other items of equipment having the same capability or better
 - 13) Equipment used for ventilation or catalytic water treatment purposes if analysis may result in hazardous materials being discharged
 - 14) Equipment capable of measuring any of the following harmful agents or any other equipment having the same capability or better if such agents are to be monitored
 - a) Toluene diisocyanate(TDI) or other isocyanate compounds: High performance liquid chromatography(HPLC)
 - b) Silicon dioxide(SiO₂): X-Ray diffractometers or FT-IR spectrometers
 - c) Asbestos: Phase microscopes and accessories required for asbestos analysis

2. In-house monitoring organization

a. Staffing standards

- 1) One or more certified engineers specializing in industrial hygiene management or higher or one or more or any person who has acquired an industrial engineer license in the field of industrial hygiene management and then practiced for two years or longer
- 2) One or more of any person who has majored in occupational health(hygiene), environmental health(hygiene), environmental engineering, hygiene engineering, pharmaceutical science, chemistry, or chemical engineering(Such persons, however, may be excluded from the requirement if the workplace to be monitored exclusively generates harmful agents not requiring lab analysis.)

b. Facility standards: Work environment monitoring preparation rooms or analysis labs

c. Equipment standards: Equipment necessary to monitor and analyze harmful agents generated at the applicable workplace or the workplace to be monitored

* Notes:

1. If the applicable organization intends to obtain or has obtained designation as a special medical examination provider under Article 103, or a safety and health surveyor under Article 128, and maintains any items of equipment as set forth in 2), 4), 6), 7), 10), 11), 13) and 14) of subparagraph 1 c, then such items of equipment may be shared in consideration of analysis capacity etc.
2. Any designated monitoring service provider not maintaining the equipment as set forth in subparagraph 1 c 14) may collect samples of harmful agents as set forth in subparagraph 1 c 14) and contract any workplace, contracted monitoring service provider or harmful agent— or line of industry—specific work environment research organization to analyze such samples.

[Table 12-2] <Amended July 6, 2011>

Harmful Agents Requiring Special Medical Examinations

(referred to in Article 98 (2))

1. Chemical agents

a. Organic compounds (108)

- 1) Gasoline
- 2) Glutaraldehyde
- 3) β -naphthylamine
- 4) Nitroglycerin
- 5) Nitromethane
- 6) Nitrobenzene
- 7) p-nitroaniline (p-aminonitrobenzene)
- 8) p-nitrochlorobenzene
- 9) Dinitrotoluene
- 10) Dimethylaniline (dimethylamino benzene)
- 11) p-dimethylaminoazobenzene
- 12) N,N-dimethylacetamide
- 13) Dimethylformamide (N,N-dimethylformamide)
- 14) 4,4'-diamino-3,3'-dichlorodiphenylmethane
- 15) Diethylenetriamine
- 16) Diethyl ether (ethyl ether)
- 17) 1,4-dioxane
- 18) Diisobutylketone
- 19) Dichloromethane (dichloromethylene)
- 20) O-dichlorobenzene
- 21) 1,2-dichloroethylene (dichloroacetylene)
- 22) Dichlorofluoromethane (dichlorodifluoromethane)
- 23) Magenta
- 24) Maleic anhydride
- 25) 2-methoxyethanol (ethylene glycol monoethyl ether, methyl cellosolve)
- 26) Methylene bisphenyl isocyanate
- 27) Methyl n-butyl ketone (methyl butyl ketone)
- 28) O-methyl cyclohexanone
- 29) Methyl cyclohexanol
- 30) Methyl n-amyl ketone (2-heptanone)
- 31) Methyl alcohol
- 32) Methyl ethyl ketone
- 33) Methyl isobutyl ketone

- 34) Methyl chloride(chloromethane)
- 35) Methyl chloroform(1,1,1-trichloroethane)
- 36) Benzene
- 37) Benzidine and its salts
- 38) 1,3-butadiene
- 39) 2-Butoxyethanol(ethylene glycol monobutyl ether, butyl cellosolve, EGBE)
- 40) 2-butoxyethanol acetate(ethylene glycol monobutyl ether acetate)
- 41) N-butyl alcohol(1-butanol)
- 42) Sec-butyl alcohol(2-butanol)
- 43) 1-bromopropane
- 44) 2-bromopropane
- 45) Methylbromide
- 46) Carbon tetrachloride
- 47) Stoddard solvent
- 48) Styrene
- 49) Cyclohexanone
- 50) Cyclohexanol
- 51) Cyclohexane
- 52) Cyclohexene
- 53) Aniline(aminobenzene) and homologues
- 54) Acetonitrile
- 55) Acetone
- 56) 2-ethoxyethyl acetate(2-ethoxy acetic acid, ethylene glycol monoethyl ether acetate)
- 57) Acetaldehyde
- 58) Acrylonitrile
- 59) Acrylamide
- 60) 2-ethoxyethanol(ethylene glycol monoethyl ether)
- 61) Ethylene glycol(1,2-dihydroxyethane)
- 62) Ethylene glycol dinitrate (nitroglycol)
- 63) Ethylene imine
- 64) Ethylene chlorohydrin(2-chloroethanol)
- 65) Ethylbenzene
- 66) Ethyl acrylate(ethyl acrylic acid)
- 67) 2,3-epoxy-1-propanol (glycidol)
- 68) Epichlorohydrin
- 69) Polychlorobiphenyl
- 70) Auramine

- 71) Methyl iodide
- 72) Isobutyl alcohol
- 73) Isoamyl alcohol(isopentyl alcohol)
- 74) Isopropyl alcohol
- 75) Ethylene dichloride(1,2-dichloroethane)
- 76) Carbon disulfide
- 77) 2-methoxyethyl acetate(ethylene glycol monomethyl ether acetate, cellosolve acetate)
- 78) Isoamyl acetate(pentyl acetate)
- 79) Coal tar pitch volatiles
- 80) Cresol
- 81) Xylene
- 82) Chloromethyl methyl ether
- 83) Bis-chloromethyl ether(Chloroether)
- 84) Chlorobenzene
- 85) Oil of turpentine
- 86) 1,1,2,2-tetrachloroethane(tetrachloroacetylene)
- 87) Tetrahydrofuran
- 88) Toluene
- 89) Toluene-2,4-diisocyanate
- 90) Toluene-2,6-diisocyanate
- 91) Trichloromethane (chloroform)
- 92) 1,1,2-trichloroethane
- 93) Trichloroethylene
- 94) 1,2,3-trichloropropane
- 95) Perchloroethylene(tetrachloroethylene)
- 96) Phenol
- 97) Pentachlorophenol
- 98) Formaldehyde
- 99) β -propiolactone
- 100) O-phthalodinitrile
- 101) Phthalic anhydride
- 102) Pyridine
- 103) Hydrazine
- 104) Hexamethylene diisocyanate
- 105) Hexane(n-hexane)
- 106) Heptane(n-heptane)
- 107) Dimethyl sulfate

108) Hydroquinone(1,4-dihydroxy benzene)

109) Formulations containing 1 percent or more by weight of any of the substances as set forth in items 1) through 108)

b. Metals (19)

1) Copper dusts, fume and mists, as Cu

2) Lead and inorganic compounds, as Pb

3) Nickel and inorganic compounds, as Ni

4) Manganese and inorganic compounds, as Mn

5) Zinc oxide dust, as Zn

6) Iron oxide dust and fume, as Fe

7) Arsenic trioxide

8) Mercury and compounds, as Hg

9) Antimony and compounds, as Sb

10) Aluminum and compounds, as Al

11) Tetraalkyl lead

12) Vanadium pentoxide dust and fume, as V₂O₅

13) Iodine

14) Tin and compounds, as Sn

15) Zirconium and compounds, as Zr

16) Cadmium and compounds, as Cd

17) Cobalt dust and fume, as Co

18) Chromium and compounds, as Cr

19) Tungsten and compounds, as W

20) Formulations containing 1 percent or more by weight of any of the substances as set forth in items 1) through 19)

c. Acids and bases (8)

1) Acetic anhydride(acetic acid anhydride)

2) Hydrogen fluoride, hydro fluoric acid

3) Sodium cyanide

4) Potassium cyanide

5) Hydrogen chloride

6) Nitric acid

7) Trichloro acetic acid(trichloroacetate)

8) Sulfuric acid

9) Formulations containing 1 percent or more by weight of any of the substances as set forth in items 1) through 8)

d. Gaseous materials (14)

- 1) Fluorine
- 2) Bromine
- 3) Ethylene oxide
- 4) Arsine
- 5) Hydrogen cyanide
- 6) Sulfur dioxide
- 7) Chlorine
- 8) Ozone
- 9) Nitrogen dioxide
- 10) Nitric oxide
- 11) Carbon monoxide
- 12) Phosgene
- 13) Phosphine
- 14) Hydrogen sulfide
- 15) Formulations containing 1 percent or more by weight of any of the substances as set forth in items 1) through 14)

e. Substances requiring permits under Article 30 of the Decree (13)

- 1) Dichlorobenzidine and its salts
- 2) α -naphthylamine and its salts
- 3) Zinc chromate, as Cr
- 4) O-tolidine and its salts
- 5) Dianisidine and its salts
- 6) Beryllium and its compounds, as Be
- 7) Arsenic and inorganic compounds, as As
- 8) Chromite ore processing (chromate), as Cr
- 9) Coal tar pitch volatiles, as benzene soluble aerosol
- 10) Nickel subsulfide, as Ni
- 11) Vinyl chloride
- 12) Benzotrichloride
- 13) Asbestos, chrysotile
- 14) Formulations containing 1 percent or more by weight of any of the substances as set forth in items 1) through 11) and 13)
- 15) Formulations containing 0.5 percent or more by weight of the substance as set forth in item 12)

f. Metalworking fluids: mineral oil mist (mineral oil)

2. Dusts (6)
 - 1) Grain dust
 - 2) Mineral dust
 - 3) Cotton dust
 - 4) Wood dust
 - 5) Welding fume
 - 6) Glass fiber dust

3. Physical agents (8)
 - 1) Noise generated in noise work, intense noise work and impact noise work under the provisions of subparagraphs 1 through 3 of Article 512 of the Safety and Health Regulations
 - 2) Vibration generated in high-vibration work as set forth in subparagraph 4 of Article 512 of the Safety and Health Regulations
 - 3) Radioactive rays as set forth in subparagraph 1 of Article 573 of the Safety and Health Regulations
 - 4) High pressure
 - 5) Low pressure
 - 6) Hazardous rays
 - a) Ultraviolet rays
 - b) Infrared rays
 - c) Microwave and radio wave

[Table 12-3] <Amended Aug. 7, 2009>

Time Frame and Frequency of Special Medical Examinations

(referred to in Article 99 (2))

Classifi cation	Subject harmful agent	Time frame	Cycle
		First special medical examination after assignment	
1	N,N-dimethylacetamide N,N-dimethylformamide	Within 1 month	6 months
2	Benzene	Within 2 months	6 months
3	1,1,2,2-tetrachloroethane Carbon tetrachloride Acrylonitrile Vinyl chloride	Within 3 months	6 months
4	Asbestos, cotton dust	Within 12 months	12 months
5	Mineral dust Wood dust Noise and impact noise	Within 12 months	24 months
6	All harmful agents as set forth in Table 12-2 with the exception of those as set forth in the provisions of subparagraphs 1 through 5	Within 6 months	12 months

[Table 13] <Amended July 6, 2011>

Test Items of Special, Pre-assignment, and Occasional Medical Examinations (referred to in Article 100 (4))

1. Test items of special, pre-assignment, and occasional medical examinations by harmful agent

a. Chemical agents

1) Organic compounds (108)

No.	Harmful agent	Primary test items	Secondary test items
1	Gasoline	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP ② Urinary system: 10 urine tests ③ Nervous system: History taking about nervous system symptoms, paying attention to nervous system signs	Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography ② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen ③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination
2	Glutaraldehyde	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation and spirometry ② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations ① Respiratory system: Chest radiography(lateral), chest radiography(posteroanterior), serial peak expiratory flow rate monitoring during periods of work activity, and non-specific airway hypersensitivity testing ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscopeexamination, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination
3	β-naphthylamine	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Urinary system: 10 urine tests, and	Laboratory tests and examinations ① Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and urological care ② Eyes and skin: Quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination

		<p>cytologic examination of urine (on the first morning urine)</p> <p>② Eyes and skin: History taking about related symptoms</p>	
4	Nitroglycerin	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, and white blood cell differential count</p> <p>② Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride</p>	
5	Nitromethane	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p>	<p>Laboratory tests and examinations</p> <p>Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p>
6	Nitrobenzene	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, white blood cell differential count, and reticulocyte count</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>③ Eyes and skin: History</p>	<p>Laboratory tests and examinations</p> <p>① Hematopoietic system: Blood smear testing</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p> <p>③ Eyes and skin: Slit-lamp microscope examination, quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination</p>

		taking about mucous membrane irritation symptoms	
7	p-nitroaniline (p-aminonitrobenzene)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, and hematocrit</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>(4)Biomarker testing: Methemoglobin in blood (during periods of work activity or upon completion of work activity)</p>	<p>Laboratory tests and examinations</p> <p>Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p>
8	p-nitrochlorobenzene	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, and hematocrit</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>③ Urinary system: 10 urine tests</p> <p>(4)Biomarker testing: Methemoglobin in blood (during periods of work activity or upon completion of work activity)</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p>
9	Dinitrotoluene	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, and hematocrit</p> <p>② Hepatobiliary system:</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p>

		<p>Serum GOT, serum GPT, and gamma GTP</p> <p>③ Reproductive system: History taking about reproductive system symptoms</p> <p>(4) Biomarker testing: Methemoglobin in blood (during periods of work activity or upon completion of work activity)</p>	<p>② Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males)</p>
10	Dimethylaniline (dimethylamino benzene)	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, and hematocrit</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>(4) Biomarker testing: Methemoglobin in blood (during periods of work activity or upon completion of work activity)</p>	<p>Laboratory tests and examinations</p> <p>Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p>
11	p-dimethylaminoazobenzene	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>(1) Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Skin, nasal cavity, and pharynx: Quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination</p> <p>(2) Biomarker testing: Methemoglobin in blood</p>
12	N,N-dimethylacet	(1) Occupational and exposure	Laboratory tests and examinations

	amide	<p>history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Nervous system: History takingrelated to nervous system conditions, paying attention to nervous system signs</p> <p>(4)Biomarker testing: N-methylacetamide in urine(upon completion of work activity)</p>	<p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
13	Dimethylformamide (N,N-dimethylformamide)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p> <p>(4)Biomarker testing: N-methylformamide (NMF)in urine(sampled upon completion of work activity)</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p>
14	4,4'-diamino-3,3'-dichlorodiphenylmethane	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Respiratory system: Auscultation and chest radiography (posteroanterior)</p> <p>③ Urinary system: 10 urine tests</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Respiratory system: Chest radiography (lateral)</p> <p>③ Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p>

15	Diethylene triamine	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation and spirometry</p> <p>② Eyes and skin: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography(lateral), chest radiography(posteroanterior), serial peak expiratory flow rate monitoring during periods of work activity, and non-specific airway hypersensitivity testing</p> <p>② Eyes and skin: Slit-lamp microscope examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p>
16	Diethyl ether (ethyl ether)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
17	1,4-dioxane	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
18	Diisobutylketone	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Nervous system: History</p>	<p>Laboratory tests and examinations</p> <p>Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>

		taking related to nervous system conditions, paying attention to nervous system signs	
19	Dichloromethane (dichloromethylene)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>(1)Laboratory tests and examinations</p> <p>Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>(2)Biomarker testing: Carboxyhemoglobin level in blood (sampled upon completion of work activity)</p>
20	O-dichlorobenzene	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p>
21	1,2-dichloroethylene (dichloroacetylene)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Nervous system: History taking related to nervous system conditions, paying</p>	<p>Laboratory tests and examinations</p> <p>Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>

		attention to nervous system signs	
22	Dichlorofluoromethane (dichlorodifluoromethane)	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride	
23	Magenta	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Urinary system: 10 urine tests, and cytologic examination of urine (on the first morning urine)	Laboratory tests and examinations Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and urological care
24	Maleic anhydride	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation and spirometry ② Eyes, skin, nasal cavity, and pharynx: History taking about related symptoms	Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral), chest radiography (posteroanterior), serial peak expiratory flow rate monitoring during periods of work activity, and non-specific airway hypersensitivity testing ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination
25	2-methoxyethanol (ethylene glycol monoethyl ether, methyl cellosolve)	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet	Laboratory tests and examinations ① Hematopoietic system: Blood smear testing, lactate dehydrogenase, total bilirubin, and direct bilirubin ② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination ③ Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and

		<p>count, white blood cell differential count, and reticulocyte count</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Reproductive system: History taking about reproductive system symptoms</p>	testosterone (males)
26	Methylene bisphenyl isocyanate	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations Respiratory system: Auscultation and spirometry</p>	<p>Laboratory tests and examinations Respiratory system: Chest radiography(lateral), chest radiography(posteroanterior), serial peak expiratory flow rate monitoring during periods of work activity, and non-specific airway hypersensitivity testing</p>
27	Methyl n-butyl ketone (methyl butyl ketone)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>(1)Laboratory tests and examinations Nervous system: Electromyography, nerve conduction velocity study, and neurologic examination</p> <p>(2)Biomarker testing: 2,5-hexanedione in urine(sampled upon completion of work activity)</p>
28	Methyl cyclohexanone	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP ② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph ② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
29	O-methyl	(1)Occupational and exposure	Laboratory tests and examinations

	cyclohexanone	<p>history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
30	Methyl n-amyl ketone (2-heptanone)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Skin: History taking about related symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>② Skin: Quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p>
31	Methyl alcohol	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>(1)Laboratory tests and examinations</p> <p>① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, nasal and pharyngeal examination, fundus examination, Goldmann tonometry, optic nerve examination, and ophthalmological screening</p> <p>(2)Biomarker testing: Methanol in blood or urine(sampled upon completion of work activity)</p>
32	Methyl ethyl ketone	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p>	<p>(1)Laboratory tests and examinations</p> <p>① Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, and neurologic examination</p>

		<p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Respiratory system: Auscultation and chest radiography (posteroanterior)</p>	<p>② Respiratory system: Chest radiography (lateral) and spirometry</p> <p>(2) Biomarker testing: Methyl ethyl ketone in urine (sampled upon completion of work activity)</p>
33	Methyl isobutyl ketone	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Respiratory system: Auscultation and chest radiography (posteroanterior)</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>④ Skin: History taking about related symptoms</p>	<p>(1) Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Respiratory system: Chest radiography (lateral) and spirometry</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>④ Skin: Quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination</p> <p>(2) Biomarker testing: Methyl isobutyl ketone in urine (sampled upon completion of work activity)</p>
34	Methyl chloride (chloromethane)	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Reproductive system: History taking about reproductive system symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>③ Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males)</p>

35	Methyl chloroform (1,1,1-trichloroethane)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>(4)Biomarker testing: Total trichloroethanol or trichloroacetic acid in urine(sampled upon completion of Friday work activity)</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
36	Benzene	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, and white blood cell differential count</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>(1)Laboratory tests and examinations</p> <p>① Hematopoietic system: Blood smear testing and reticulocyte count</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p> <p>(2)Biomarker testing: One of: benzene in blood, phenol in urine, or muconic acid in urine(sampled upon completion of work activity)</p>
37	Benzidine and its	(1)Occupational and exposure	Laboratory tests and examinations

	salts	<p>history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests, and cytologic examination of urine(on the first morning urine)</p> <p>③ Skin: History taking about related symptoms</p>	<p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and urological care</p> <p>③ Skin: Quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p>
38	1,3-butadiene	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Reproductive system: History taking about reproductive system symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>② Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone(males)</p>
39	2-Butoxyethanol (ethylene glycol monobutyl ether, butyl cellosolve, EGBE)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, white blood cell differential count, and reticulocyte count</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous</p>	<p>Laboratory tests and examinations</p> <p>① Hematopoietic system: Blood smear testing, lactate dehydrogenase, total bilirubin, and direct bilirubin</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>④ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>

		<p>system signs</p> <p>④ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	
40	2-butoxyethanol acetate (ethylene glycol monobutyl ether acetate)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, white blood cell differential count, and reticulocyte count</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>① Hematopoietic system: Blood smear testing, lactate dehydrogenase, total bilirubin, and direct bilirubin</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
41	N-butyl alcohol (1-butanol)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
42	Sec-butyl alcohol (2-butanol)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>

		<p>(3) Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
43	1-bromopropane	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, white blood cell differential count, and reticulocyte count</p> <p>③ Reproductive system: History taking about reproductive system symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>② Hematopoietic system: Blood smear testing</p> <p>③ Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males)</p>
44	2-bromopropane	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, white blood cell differential count, and reticulocyte count</p> <p>② Reproductive system: History taking about reproductive system symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hematopoietic system: Blood smear testing</p> <p>② Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males)</p>

45	Methylbromide	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation and chest radiography (posteroanterior)</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral) and spirometry</p> <p>② Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, and neurologic examination</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
46	Carbon tetrachloride	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>④ Eyes and skin: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>④ Eyes and skin: Slit-lamp microscope examination, KOH examination, and skin prick testing</p>
47	Stoddard solvent	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Urinary system: 10 urine tests</p> <p>② Nervous system:</p>	<p>Laboratory tests and examinations</p> <p>① Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope</p>

		<p>History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
48	Styrene	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Respiratory system: Auscultation and chest radiography (posteroanterior)</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>④ Reproductive system: History taking about reproductive system symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gammaGTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Respiratory system: Chest radiography (lateral) and spirometry</p> <p>③ Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, and neurologic examination</p> <p>④ Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males)</p>
49	Cyclohexanone	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>

50	Cyclohexanol	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination
51	Cyclohexane	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs	Laboratory tests and examinations Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination
52	Cyclohexene	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs	Laboratory tests and examinations Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination
53	Aniline (aminobenzene) and homologues	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hematopoietic system: Hemoglobin content, and hematocrit ② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP ③ Urinary system: 10 urine tests (4)Biomarker testing: Methemoglobin in blood	Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph ② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen

		(during periods of work activity or upon completion of work activity)	
54	Acetonitrile	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Cardiovascular system: Chest radiographyy, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha–fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
55	Acetone	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation and chest radiography (posteroanterior)</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>(1)Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography(lateral) and spirometry</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>(2)Biomarker testing: Acetone in urine(sampled upon completion of work activity)</p>
56	2-ethoxyethyl acetate (2-ethoxy acetic acid, ethylene glycol monoethyl ether acetate)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet</p>	<p>Laboratory tests and examinations</p> <p>① Hematopoietic system: Blood smear testing</p> <p>② Reproductive system: Estrogen (females), luteinizing hormone, follicle–stimulating hormone, and testosterone (males)</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit–lamp microscope examination, KOH examination, skin</p>

		<p>count, white blood cell differential count, and reticulocyte count</p> <p>② Reproductive system: History taking about reproductive system symptoms</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>prick testing, and nasal and pharyngeal examination</p>
57	Acetaldehyde	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
58	Acrylonitrile	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Eyes and skin: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>③ Eyes and skin: Slit-lamp microscope examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p>
59	Acrylamide	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Electromyography, nerve conduction velocity study,</p>

		<p>major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Eyes and skin: History taking about mucous membrane irritation symptoms</p>	<p>neurobehavioral testing, and neurologic examination</p> <p>② Eyes and skin: Slit-lamp microscope examination, KOH examination, and skin prick testing</p>
60	2-ethoxyethanol (ethylene glycol monoethyl ether)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, and white blood cell differential count</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>③ Reproductive system: History taking about reproductive system symptoms</p>	<p>(1)Laboratory tests and examinations</p> <p>① Hematopoietic system: Reticulocyte count and blood smear testing</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>③ Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males)</p> <p>(2)Biomarker testing: 2-ethoxy acetic acid in urine(sampled upon completion of Friday work activity)</p>
61	Ethylene glycol (1,2-dihydroxyethane)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
62	Ethylene glycol dinitrate (nitroglycol)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system:</p>	<p>Laboratory tests and examinations</p> <p>Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody,</p>

		<p>Hemoglobin content, and hematocrit</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>③ Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride</p> <p>(4) Biomarker testing: Methemoglobin in blood (during periods of work activity or upon completion of work activity)</p>	<p>hepatitis A antibody, and ultrasonograph</p>
63	Ethylene imine	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination</p>
64	Ethylene chlorohydrin (2-chloroethanol)	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>

		<p>system signs</p> <p>④ Eyes, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>④ Eyes, nasal cavity, and pharynx: Slit-lamp microscope examination, fundus examination, Goldmann tonometry, ophthalmological screening, and nasal and pharyngeal examination</p>
65	Ethylbenzene	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
66	Ethyl acrylate (ethyl acrylic acid)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
67	2,3-epoxy-1-propanol (glycidol)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
68	Epichlorohydrin	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system:</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p>

		<p>10 urine tests</p> <p>③ Reproductive system: History taking about reproductive system symptoms</p> <p>④ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males)</p> <p>④ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p>
69	Polychlorobiphenyl	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Reproductive system: History taking about reproductive system symptoms</p> <p>③ Eyes and skin: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males)</p> <p>③ Eyes and skin: Slit-lamp microscope examination, KOH examination, and skin prick testing</p>
70	Auramine	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Urinary system: 10 urine tests, and cytologic examination of urine(on the first morning urine)</p>	<p>Laboratory tests and examinations</p> <p>Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and urological care</p>
71	Methyl iodide	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Nervous system: History taking related</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, and neurologic examination</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin</p>

		<p>to nervous system conditions, paying attention to nervous system signs</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>prick testing, and nasal and pharyngeal examination</p>
72	Isobutyl alcohol	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
73	Isoamyl alcohol (isopentyl alcohol)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
74	Isopropyl alcohol	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>(1)Laboratory tests and examinations</p> <p>Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p> <p>(2)Biomarker testing: Acetone in blood or urine(sampled upon completion of work activity)</p>
75	Ethylene	<p>(1)Occupational and exposure</p>	<p>Laboratory tests and examinations</p>

	dichloride (1,2-dichloroethane)	<p>history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>④ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>④ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
76	Carbon disulfide	<p>(1)Occupational and exposure history taking</p> <p>(2)Historytaking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Cardiovascular system: Chest radiographyy, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride</p> <p>③ Urinary system: 10 urine tests</p> <p>④ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>⑤ Reproductive system: History taking about reproductive system symptoms</p> <p>⑥ Eyes: History taking and examination about related symptoms</p> <p>⑦ Otorhinolaryngological system: Pure-tone audiometry (air conduction on both</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, and neurologic examination</p> <p>④ Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males)</p> <p>⑤ Eyes: Slit-lamp microscope examination, fundus examination, Goldmann tonometry, optic nerve examination, and ophthalmological screening</p> <p>⑥ Otorhinolaryngological system: Pure-tone audiometry (air and bone conduction on both channels), and immittance audiometry (tympanometry)</p>

		channels), and otoscopy	
77	2-methoxyethyl acetate (ethylene glycol monomethyl ether acetate, cellosolve acetate)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, white blood cell differential count, and reticulocyte count</p> <p>② Reproductive system: History taking about reproductive system symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hematopoietic system: Blood smear testing</p> <p>② Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males)</p>
78	Isoamyl acetate (pentyl acetate)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
79	(Coal tar pitch volatiles)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation, chest radiography (posteroanterior), and sputum cytology</p> <p>② Urinary system: 10 urine tests, and cytologic examination of urine (on the first morning urine)</p>	<p>(1)Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral) and chest computed tomography</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and urological care</p> <p>③ Skin, nasal cavity, and pharynx: Quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, KOH examination, and nasal and pharyngeal examination</p> <p>(2)Biomarker testing: 1-hydroxypyrene in urine</p>

		③ Skin, nasal cavity, and pharynx: History taking about related symptoms	
80	Cresol	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>④ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>④ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
81	Xylene	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p> <p>(4)Biomarker testing: Methyl hippuric acid in urine(sampled upon completion of work activity)</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
82	Chloromethyl	(1)Occupational and exposure	Laboratory tests and examinations

	methyl ether	<p>history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Respiratory system: Auscultation, chest radiography(posteroanterior), and sputum cytology</p>	<p>Respiratory system: Chest radiography(lateral) and chest computed tomography</p>
83	Bis-chloromethyl ether (Chloroether)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation, chest radiography(posteroanterior), and sputum cytology</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography(lateral) and chest computed tomography</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
84	Chlorobenzene	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>(1)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p> <p>(2)Biomarker testing: Total chlorocatechol in urine(sampled upon completion of work activity)</p>
85	Oil of turpentine	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Neurobehavioral testing, psychological testing, and</p>

		<p>major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>② Eyes, Skin: History taking about related symptoms</p>	<p>neurologic examination</p> <p>② Eyes and skin: Slit-lamp microscope examination, quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination</p>
86	1,1,2,2-tetrachloroethane (tetrachloroacetylene)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>④ Skin: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>④ Skin: KOH examination and skin prick testing</p>
87	Tetrahydrofuran	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
88	Toluene	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system:</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen,</p>

		<p>Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>④ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms, and examinations</p> <p>(4) Biomarker testing: Hippuric acid in urine (sampled upon completion of work activity)</p>	<p>hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, and neurologic examination</p> <p>④ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
89	Toluene-2,4-diisocyanate	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation and spirometry</p> <p>② Skin: History taking about related symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (posteroanterior and lateral), serial peak expiratory flow rate monitoring during periods of work activity, and non-specific airway hypersensitivity testing</p> <p>② Skin: Quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination</p>
90	Toluene-2,6-diisocyanate	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation and spirometry</p> <p>② Skin: History taking about related symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (posteroanterior and lateral), serial peak expiratory flow rate monitoring during periods of work activity, and non-specific airway hypersensitivity testing</p> <p>② Skin: Quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination</p>
91	Trichloromethane (chloroform)	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody,</p>

		<p>GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>④ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>④ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
92	1,1,2-trichloroethane	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
93	Trichloroethylene	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride</p> <p>③ Urinary system: 10 urine tests</p> <p>④ Nervous system: History taking related to nervous system conditions, paying attention to nervous</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>④ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>

		<p>system signs</p> <p>⑤ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p> <p>(4) Biomarker testing: Total trichlorides or trichloroacetic acid in urine (sampled upon completion of Friday work activity)</p>	
94	1,2,3-trichloropropane	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
95	Perchloroethylene (tetrachloroethylene)	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>④ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms, and examinations</p> <p>(4) Biomarker testing: Total</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, and neurologic examination</p> <p>④ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>

		trichlorides or trichloroacetic acid in urine(sampled upon completion of Friday work activity)	
96	Phenol	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>(1)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT,gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p> <p>(2)Biomarker testing: Total phenol in urine(sampled upon completion of work activity)</p>
97	Pentachlorophenol	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>④ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>(1)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>③ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>④ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p> <p>(2)Biomarker testing: Pentachlorophenol in urine(sampled upon completion of Friday work activity), and free pentachlorophenol in urine(sampled</p>

			upon completion of work activity)
98	Formaldehyde	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation and chest radiography (posteroanterior) ② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral) and spirometry ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, Quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, KOH examination, and nasal and pharyngeal examination
99	β -propiolactone	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Eyes and skin: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations Eyes and skin: Slit-lamp microscope examination, KOH examination, and skin prick testing
100	O-phthalodinitrile	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, white blood cell differential count, and reticulocyte count ② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs	Laboratory tests and examinations ① Hematopoietic system: Blood smear testing ② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination
101	Phthalic anhydride	(1)Occupational and exposure history taking (2)History taking related to major target organs	Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral), chest radiography (posteroanterior), serial

		<p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation and spirometry</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>peak expiratory flow rate monitoring during periods of work activity, and non-specific airway hypersensitivity testing</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p>
102	Pyridine	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests</p> <p>③ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
103	Hydrazine	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p>
104	Hexamethylene diisocyanate	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to</p>	<p>Laboratory tests and examinations</p> <p>Respiratory system: Chest radiography(lateral), chest</p>

		major target organs (3)Laboratory tests and examinations Respiratory system: Auscultation and spirometry	radiography(posteroanterior), serial peak expiratory flow rate monitoring during periods of work activity, and non-specific airway hypersensitivity testing
105	Hexane (n-hexane)	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs ② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms (4)Biomarker testing: 2,5-hexanedione in urine(sampled upon completion of work activity)	Laboratory tests and examinations ① Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, and neurologic examination ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, fundus examination, Goldmann tonometry, ophthalmological screening, KOH examination, skin prick testing, and nasal and pharyngeal examination
106	Heptane (n-heptane)	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs	Laboratory tests and examinations Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, and neurologic examination
107	Dimethyl sulfate	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP ② Urinary system: 10 urine tests ③ Nervous system:	Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph ② Urinary system: Quantitation of proteinuria, creatinine, blood urea

		History taking related to nervous system conditions, paying attention to nervous system signs ④ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	nitrogen ③ Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, and neurologic examination ④ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination
108	Hydroquinone (1,4-dihydroxy benzene)	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs ② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations ① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), and skin patch testing

* The Biomarker tests among the test items shall not be conducted on those workers to be initially assigned to the applicable work.

2) Metals (19)

No.	Harmful agent	Primary test items	Secondary test items
1	Copper dusts, fume and mists, as Cu	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP ② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination
2	Lead and inorganic	(1)Occupational and exposure history taking	(1)Laboratory tests and examinations ① Hematopoietic system: Blood

	compounds, as Pb	<p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, and white blood cell differential count</p> <p>② Urinary system: 10 urine tests, and blood pressure checking</p> <p>③ Nervous and gastrointestinal systems: History taking and examination about related symptoms</p> <p>(4)Biomarker testing: Lead in blood</p>	<p>smear testing, iron, total iron binding capacity, and serum ferritin</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and beta-2 microglobulin</p> <p>③ Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, and neurologic examination</p> <p>(2)Biomarker testing:</p> <p>① Zinc protoporphyrin in blood</p> <p>② Delta-aminolevulinic acid in urine</p> <p>③ Lead in urine</p>
3	Nickel and inorganic compounds, as Ni	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation, chest radiography (posteroanterior), sputum cytology examination, and spirometry</p> <p>② Skin, nasal cavity, and pharynx: History taking about related symptoms</p>	<p>(1)Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral), serial peak expiratory flow rate monitoring during periods of work activity, non-specific airway hypersensitivity testing, and chest computed tomography</p> <p>② Skin, nasal cavity, and pharynx: Quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, KOH examination, and nasal and pharyngeal examination</p> <p>(2) Biomarker testing: Nickel in urine</p>
4	Manganese and inorganic compounds, as Mn	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation and chest radiography (posteroanterior)</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral) and spirometry</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>

5	Zinc oxide dust, as Zn	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Respiratory system: History taking about metal fever symptoms, auscultation, and chest radiography (posteroanterior)	Laboratory tests and examinations Respiratory system: Chest radiography(lateral)
6	Iron oxide dust and fume, as Fe	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Respiratory system: Auscultation, chest radiography(posteroanterior), and spirometry	Laboratory tests and examinations Respiratory system: Chest radiography(lateral) and tuberculosis smear testing
7	Arsenic trioxide	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, white blood cell differential count, and reticulocyte count ② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP ③ Respiratory system: Auscultation ④ Urinary system: 10 urine tests ⑤ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	(1) Laboratory tests and examinations ① Hematopoietic system: Blood smear testing, total iron binding capacity, serum ferritin, lactate dehydrogenase, total bilirubin, and direct bilirubin ② Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonograph ③ Respiratory system: Chest radiography(posteroanterior), spirometry, and chest computed tomography ④ Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen ⑤ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH

			examination (2) Biomarker testing: Arsenic in urine or blood
8	Mercury and compounds, as Hg	(1) Occupational and exposure history taking (2) History taking related to major target organs (3) Laboratory tests and examinations ① Urinary system: 10 urine tests, and blood pressure checking ② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs ③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms (4) Biomarker testing: Mercury in urine	(1) Laboratory tests and examinations ① Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and beta-2 microglobulin ② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination ③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination (2) Biomarker testing: Mercury in blood
9	Antimony and compounds, as Sb	(1) Occupational and exposure history taking (2) History taking related to major target organs (3) Laboratory tests and examinations ① Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride ② Respiratory system: Auscultation, chest radiography (posteroanterior), and spirometry ③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	(1) Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral) and tuberculosis smear testing ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination (2) Biomarker testing: Antimony in urine
10	Aluminum and compounds, as Al	(1) Occupational and exposure history taking (2) History taking related to major target organs (3) Laboratory tests and	Laboratory tests and examinations Respiratory system: Chest radiography (lateral), serial peak expiratory flow rate monitoring during

		examinations Respiratory system: Auscultation, chest radiography (posteroanterior), and spirometry	periods of work activity, and non-specific airway hypersensitivity testing
11	Tetraalkyl lead	(1) Occupational and exposure history taking (2) History taking related to major target organs (3) Laboratory tests and examinations ① Urinary system: 10 urine tests, and blood pressure checking ② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs (4) Biomarker testing: Lead in blood	(1) Laboratory tests and examinations ① Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and beta-2 microglobulin ② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination (2) Biomarker testing ① Zinc protoporphyrin in blood ② Delta-aminolevulinic acid in urine ③ Lead in urine
12	Vanadium pentoxide dust and fume, as V ₂ O ₅	(1) Occupational and exposure history taking (2) History taking related to major target organs (3) Laboratory tests and examinations ① Respiratory system: Auscultation and chest radiography (posteroanterior) ② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	(1) Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral) and spirometry ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination (2) Biomarker testing: Vanadium in urine
13	Iodine	(1) Occupational and exposure history taking (2) History taking related to major target organs (3) Laboratory tests and examinations ① Respiratory system: Auscultation ② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs	Laboratory tests and examinations ① Respiratory system: Chest radiography (posteroanterior) and spirometry ② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination ③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination

			③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	
14	Tin and compounds, as Sn	Tin and its inorganic compounds	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation, chest radiography (posteroanterior), and spirometry ② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral) and tuberculosis smear testing ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination
		Organic tin compounds	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs ② Eyes: History taking about related symptoms	Laboratory tests and examinations ① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination ② Eyes: Slit-lamp microscope examination, fundus examination, Goldmann tonometry, and ophthalmological screening
15	Zirconium and compounds, as Zr		(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation and chest radiography (posteroanterior) ② Skin, nasal cavity, and pharynx: History taking about related symptoms	Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral) and spirometry ② Skin, nasal cavity, and pharynx: KOH examination, skin prick testing, and nasal and pharyngeal examination
16	Cadmium and compounds, as Cd		(1)Occupational and exposure history taking (2)History taking related to major target organs	(1)Laboratory tests and examinations ① Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, prostate-specific

		<p>(3)Laboratory tests and examinations</p> <p>① Urinary system: 10 urine tests, blood pressure checking, and history taking about prostate symptoms</p> <p>② Respiratory system: Auscultation, chest radiography (posteroanterior), sputum cytology examination, and spirometry</p> <p>(4)Biomarker testing: Cadmium in blood</p>	<p>antibody (males), and beta-2 microglobulin</p> <p>② Respiratory system: Chest radiography (lateral) and chest computed tomography</p> <p>(2)Biomarker testing: Cadmium in urine</p>
17	Cobalt dust and fume, as Co	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation, chest radiography (posteroanterior), and spirometry</p> <p>② Skin, nasal cavity, and pharynx: History taking about related symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral), serial peak expiratory flow rate monitoring during periods of work activity, non-specific airway hypersensitivity testing, and tuberculosis smear testing</p> <p>② Skin, nasal cavity, and pharynx: Quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, KOH examination, and nasal and pharyngeal examination</p>
18	Chromium and compounds, as Cr	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation, chest radiography (posteroanterior), spirometry, and sputum cytology examination</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about related symptoms</p>	<p>(1)Laboratory tests and examinations</p> <p>① Respiratory system (asthma and lung cancer): Chest radiography (lateral), serial peak expiratory flow rate monitoring during periods of work activity, non-specific airway hypersensitivity testing, and chest computed tomography</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, Quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, KOH examination, and nasal and pharyngeal examination</p> <p>(2)Biomarker testing: Chromium in urine or blood</p>
19	Tungsten and compounds, as W	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to</p>	<p>Laboratory tests and examinations</p> <p>Respiratory system: Chest radiography (lateral) and tuberculosis</p>

		major target organs (3)Laboratory tests and examinations Respiratory system: Auscultation, chest radiography (posteroanterior), and spirometry	smear testing
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* The Biomarker tests among the test items shall not be conducted on those workers to be initially assigned to the applicable work.

3) Acids and bases (8)

No.	Harmful agent	Primary test items	Secondary test items
1	Acetic anhydride (acetic acid anhydride)	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination
2	Hydrogen fluoride, hydrofluoric acid	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms ② Gnathological system: Dental caries examination by a dentist	(1)Laboratory tests and examinations Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination (2)Biomarker testing: Fluorides in urine (obtain the difference between before and after work activity)
3	Sodium cyanide	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and	Laboratory tests and examinations ① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination

		<p>triglyceride</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	
4	Potassium cyanide	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
5	Hydrogen chloride	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation and chest radiography (posteroanterior)</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p> <p>③ Ophthalmological system: Dental caries examination by a</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral) and spirometry</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>

		dentist	
6	Nitric acid	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation and chest radiography (posteroanterior)</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p> <p>③ Gnathological system: Dental caries examination by a dentist</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral) and spirometry</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
7	Trichloro acetic acid (trichloroacetate)	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
8	Sulfuric acid	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation and chest radiography (posteroanterior)</p> <p>② Eyes, skin, nasal cavity, pharynx, and larynx: History taking about mucous membrane irritation symptoms</p> <p>③ Gnathological system: Dental caries examination by a dentist</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral) and spirometry</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, nasal and pharyngeal examination, and laryngoscopy</p>

* The Biomarker tests among the test items shall not be conducted on those workers to be initially assigned to the applicable work.

4) Gaseous materials (14)

No.	Harmful agent	Primary test items	Secondary test items
1	Fluorine	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP ② Respiratory system: Auscultation and chest radiography(posteroanterior) ③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, lactate dehydrogenase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography ② Respiratory system: Chest radiography(lateral) and spirometry ③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination
2	Bromine	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation ② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs	(1)Laboratory tests and examinations ① Respiratory system: Chest radiography(posteroanterior) and spirometry ② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination (2)Biomarker testing: Bromide in blood
3	Ethylene oxide	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, white blood cell differential count, and reticulocyte count	Laboratory tests and examinations ① Hematopoietic system: Blood smear testing ② Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography

		<p>② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>③ Respiratory system: Auscultation</p> <p>④ Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>⑤ Reproductive system: History taking about reproductive system symptoms</p> <p>⑥ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>③ Respiratory system: Chest radiography (posteroanterior) and spirometry</p> <p>④ Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>⑤ Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males)</p> <p>⑥ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination</p>
4	Arsine	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, white blood cell differential count, and reticulocyte count</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>③ Respiratory system: Auscultation</p> <p>④ Urinary system: 10 urine tests</p> <p>⑤ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>(1) Laboratory tests and examinations</p> <p>① Hematopoietic system: Blood smear testing, lactate dehydrogenase, total bilirubin, and direct bilirubin</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p> <p>③ Respiratory system: Chest radiography (posteroanterior), spirometry, and chest computed tomography</p> <p>④ Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen</p> <p>⑤ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p> <p>(2) Biomarker testing: Arsenic in urine (sampled upon completion of Friday work activity)</p>
5	Hydrogen cyanide	<p>(1) Occupational and exposure history taking</p>	<p>Laboratory tests and examinations</p> <p>Nervous system: Neurobehavioral</p>

		<p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p>	<p>testing, psychological testing, and neurologic examination</p>
6	Sulfur dioxide	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Respiratory system: Auscultation and chest radiography (posteroanterior)</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral) and spirometry</p> <p>② Gnathological system: Dental caries examination by a dentist</p>
7	Chlorine	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation and chest radiography (posteroanterior)</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p> <p>③ Gnathological system: Dental caries examination by a dentist</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral) and spirometry</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
8	Ozone	<p>(1)Occupational and exposure history taking</p> <p>(2)Medical history: Medical history taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>Respiratory system: Auscultation and chest radiography (posteroanterior)</p>	<p>Laboratory tests and examinations</p> <p>Respiratory system: Chest radiography (lateral) and spirometry</p>

9	Nitrogen dioxide	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride</p> <p>② Respiratory system: Auscultation and chest radiography (posteroanterior)</p>	<p>Laboratory tests and examinations</p> <p>Respiratory system: Chest radiography (lateral) and spirometry</p>
10	Nitric oxide	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>Respiratory system: Auscultation and chest radiography (posteroanterior)</p>	<p>Laboratory tests and examinations</p> <p>Respiratory system: Chest radiography (lateral) and spirometry</p>
11	Carbon monoxide	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Cardiovascular system: Chest radiography, electrocardiography, total cholesterol, HDL cholesterol, and triglyceride</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs</p> <p>(4) Biomarker testing: Carboxyhemoglobin in blood (sampled within 10–15 minutes upon completion of work activity), or carbon monoxide in expiratory air (last breath sampled within 10–15 minutes upon completion of work activity)</p>	<p>Laboratory tests and examinations</p> <p>Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>
12	Phosgene	<p>(1) Occupational and exposure history taking</p>	<p>Laboratory tests and examinations</p> <p>Respiratory system: Chest</p>

		(2)History taking related to major target organs (3)Laboratory tests and examinations Respiratory system: Auscultation and chest radiography (posteroanterior)	radiography(lateral) and spirometry
13	Phosphine	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Respiratory system: Auscultation and chest radiography (posteroanterior)	Laboratory tests and examinations Respiratory system: Chest radiography(lateral) and spirometry
14	Hydrogen sulfide	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation and chest radiography (posteroanterior) ② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs	Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral) and spirometry ② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination ③ Gnathological system: Dental caries examination by a dentist

* The Biomarker tests among the test items shall not be conducted on those workers to be initially assigned to the applicable work.

5) Substances requiring permits under Article 30 of the Decree (13)

No.	Harmful agent	Primary test items	Secondary test items
1	Dichlorobenzidine and its salts	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP ② Urinary system: 10 urine tests, and cytologic examination of urine (on the first morning urine) ③ Skin: History taking	Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography ② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and urological care ③ Skin: Quantitation of immunoglobulin E (IgE), skin patch testing, skin

		about related symptoms	prick testing, and KOH examination
2	α -naphthylamine and its salts	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Urinary system: 10 urine tests, and cytologic examination of urine(on the first morning urine) ② Skin: History taking about related symptoms	Laboratory tests and examinations ① Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and urological care ② Skin: Quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination
3	Zinc chromate, as Cr	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP ② Respiratory system: Auscultation, chest radiography (posteroanterior), and sputum cytology ③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography ② Respiratory system: Chest radiography (lateral) and chest computed tomography ③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination
4	O-tolidine and its salts	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP ② Urinary system: 10 urine tests, and cytologic examination of urine(on the first morning urine)	Laboratory tests and examinations ① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography ② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and urological care

5	Dianisidine and its salts	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Urinary system: 10 urine tests, and cytologicexamination of urine(on the first morning urine)</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and urological care</p>
6	Beryllium	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation, chest radiography (posteroanterior), spirometry, and sputum cytology examination</p> <p>② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral), tuberculosis smear testing, and chest computed tomography</p> <p>② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination</p>
7	Arsenic and inorganic compounds, as As	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, white blood cell differential count, and reticulocyte count</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>③ Respiratory system: Auscultation, chest radiography (posteroanterior), and sputum</p>	<p>(1)Laboratory tests and examinations</p> <p>① Hematopoietic system: Blood smear testing, lactate dehydrogenase, total bilirubin, and direct bilirubin</p> <p>② Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p> <p>③ Respiratory system: Chest radiography (posteroanterior), spirometry, and chest computed tomography</p> <p>④ Urinary system: Quantitation of proteinuria, creatinine, blood urea</p>

		<p>cytology</p> <p>④ Urinary system: 10 urine tests</p> <p>⑤ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>nitrogen</p> <p>⑤ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p> <p>(2) Biomarker testing: Arsenic in urine (sampled upon completion of Friday work activity)</p>
8	Chromite ore processing (chromate), as Cr	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Respiratory system: Auscultation, chest radiography (posteroanterior), and sputum cytology</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p> <p>② Respiratory system: Chest radiography (lateral) and chest computed tomography</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p>
9	Coal tar pitch volatiles, as benzene soluble aerosol (coke manufacturing or handling)	<p>(1) Occupational and exposure history taking</p> <p>(2) History taking related to major target organs</p> <p>(3) Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation, chest radiography (posteroanterior), and sputum cytology</p> <p>② Urinary system: 10 urine tests, and cytologic examination of urine (on the first morning urine)</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>(1) Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral) and chest computed tomography</p> <p>② Urinary system: Quantitation of proteinuria, creatinine, blood urea nitrogen, and urological care</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination</p> <p>(2) Biomarker testing: Aromatic hydrocarbon metabolites in urine (1-hydroxypyrene or 1-hydroxypyrene glucuronide) (sampled upon completion of work activity)</p>

10	Nickel subsulfide, as Ni	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation, chest radiography (posteroanterior), sputum cytology examination, and spirometry</p> <p>② Skin, nasal cavity, and pharynx: History taking about related symptoms</p>	<p>(1)Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral), serial peak expiratory flow rate monitoring during periods of work activity, non-specific airway hypersensitivity testing, and chest computed tomography</p> <p>② Skin, nasal cavity, and pharynx: Quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, KOH examination, and nasal and pharyngeal examination</p> <p>(2) Biomarker testing: Nickel in urine</p>
11	Vinyl chloride	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, and gamma GTP</p> <p>② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs, and diagnosis of Raynaud's phenomenon</p> <p>③ Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hepatobiliary system: Serum GOT, serum GPT, gamma GTP, total protein, albumin, total bilirubin, direct bilirubin, alkaline phosphatase, alpha-fetoprotein, hepatitis B surface antigen, hepatitis B surface antibody, hepatitis C antibody, hepatitis A antibody, and ultrasonography</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p> <p>③ Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination</p>
12	Benzotrichloride	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Respiratory system: Auscultation, chest radiography (posteroanterior), and sputum cytology</p>	<p>Laboratory tests and examinations</p> <p>① Respiratory system: Chest radiography (lateral) and chest computed tomography</p> <p>② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination</p>

		② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs	
13	Asbestos	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Respiratory system: Auscultation, chest radiography (posteroanterior), sputum cytology, and spirometry	Laboratory tests and examinations Respiratory system: Chest radiography(lateral), tuberculosis smear testing, and chest computed tomography

* The Biomarker tests among the test items for coal tar pitch volatiles shall not be conducted on those workers to be initially assigned to the applicable work.

6) Metalworking fluids: Mineral oil mist (mineral oil)

No.	Harmful agent	Primary test items	Secondary test items
1	Mineral oil mist (mineral oil)	(1)Occupational and exposure history taking (2)Medical history: Medical history taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation and spirometry ② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations ① Respiratory system: Chest radiography (posteroanterior and lateral), serial peak expiratory flow rate monitoring during periods of work activity, and non-specific airway hypersensitivity testing ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination

b. Dusts (6)

No.	Harmful agent	Primary test items	Secondary test items
1	Grain dust	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Respiratory system: Auscultation and spirometry	Laboratory tests and examinations Respiratory system: Chest radiography(posteroanterior and lateral), serial peak expiratory flow rate monitoring during periods of work activity, and non-specific airway hypersensitivity testing
2	Mineral dust	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation, chest radiography (posteroanterior), sputum cytology examination, and spirometry ② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral), tuberculosis smear testing, and chest computed tomography ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination
3	Cotton dust	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Respiratory system: Auscultation and spirometry	Laboratory tests and examinations Respiratory system: Chest radiography(lateral), chest radiography(posteroanterior), serial peak expiratory flow rate monitoring during periods of work activity, and non-specific airway hypersensitivity testing
4	Wood dust	(1)Occupational and exposure history taking (2)Medical history: Medical history taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation, chest radiography (posteroanterior), and spirometry ② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral), serial peak expiratory flow rate monitoring during periods of work activity, non-specific airway hypersensitivity testing, and tuberculosis smear testing ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, nasal and pharyngeal examination, quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination

5	Welding fume	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation, chest radiography (posteroanterior), and spirometry ② Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs ③ Skin: History taking about related symptoms	Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral), serial peak expiratory flow rate monitoring during periods of work activity, non-specific airway hypersensitivity testing, and tuberculosis smear testing ② Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination ③ Skin: Quantitation of immunoglobulin E (IgE), skin patch testing, skin prick testing, and KOH examination
6	Glass fiber dust	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Respiratory system: Auscultation, chest radiography (posteroanterior), and spirometry ② Eyes, skin, nasal cavity, and pharynx: History taking about mucous membrane irritation symptoms	Laboratory tests and examinations ① Respiratory system: Chest radiography (lateral) spirometry, and tuberculosis smear testing ② Eyes, skin, nasal cavity, and pharynx: Slit-lamp microscope examination, KOH examination, skin prick testing, and nasal and pharyngeal examination

c. Physical agents (8)

No.	Harmful agent	Primary test items	Secondary test items
1	Noise generated in noise work, intense noise work and impact noise work under the provisions of subparagraphs 1 through 3 of Article 512 of the Safety and Health Regulations	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations Otorhinolaryngological system: Pure-tone audiometry (air conduction on both channels), and otoscopy	Laboratory tests and examinations Otorhinolaryngological system: Pure-tone audiometry (air and bone conduction on both channels), and immittance audiometry (tympanometry)

2	Vibration generated in high-vibration work as set forth in subparagraph 4 of Article 512 of the Safety and Health Regulations	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs,and the peripheral circulatory functions (nail press test), nervous functions (sense of pain and vibration), motor functions (grip), etc. of limbs</p> <p>② Cardiovascular system: History taking about related symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Nervous system: Electromyography, nerve conduction velocity study, neurobehavioral testing, neurologic examination, immersion test in cold water, and motor function testing</p> <p>② Cardiovascular system: Electrocardiography and fundus examination</p>
3	Radioactive rays as set forth in subparagraph 1 of Article 573 of the Safety and Health Regulations	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Hematopoietic system: Hemoglobin content, hematocrit, red blood cell count, platelet count, and white blood cell differential count</p> <p>② Eyes, skin, nervous system, and hematopoietic system: History taking about related symptoms</p>	<p>Laboratory tests and examinations</p> <p>① Hematopoietic system: Blood smear testing and reticulocyte count</p> <p>② Eyes: Slit-lamp microscope examination</p>
4	High pressure	<p>(1)Occupational and exposure history taking</p> <p>(2)History taking related to major target organs</p> <p>(3)Laboratory tests and examinations</p> <p>① Otorhinolaryngological system: Pure-tone audiometry (air conduction on both channels), and otoscopy</p> <p>② Eyes, ears, skin, respiratory system, musculoskeletal system, cardiovascular system, and dental: History taking about related</p>	<p>Laboratory tests and examinations</p> <p>① Otorhinolaryngological system: Pure-tone audiometry (air and bone conduction on both channels), and immittance audiometry (tympanometry)</p> <p>② Respiratory system: Spirometry</p> <p>③ Musculoskeletal system: Bone and joint radiography</p> <p>④ Cardiovascular system: Electrocardiography</p> <p>⑤ Dental: Gingivitis testing and periodontitis testing by a dentist</p>

		symptoms	
5	Low pressure	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Eyes, cardiovascular system, and respiratory system: History taking about related symptoms ② Otorhinolaryngological system: Pure-tone audiometry (air conduction on both channels), and otoscopy	Laboratory tests and examinations ① Eyes: Fundus examination ② Respiratory system: Chest radiography and spirometry ③ Cardiovascular system: Electrocardiography ④ Otorhinolaryngological system: Pure-tone audiometry (air and bone conduction on both channels), and immittance audiometry (tympanometry)
6	Ultraviolet rays	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Skin: History taking about related symptoms ② Eyes: History taking about related symptoms	Laboratory tests and examinations ① Skin: Quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination ② Eyes: Slit-lamp microscope examination, fundus examination, Goldmann tonometry, and ophthalmological screening
7	Infrared rays	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Skin: History taking about related symptoms ② Eyes: History taking about related symptoms	Laboratory tests and examinations ① Skin: Quantitation of immunoglobulin E(IgE), skin patch testing, skin prick testing, and KOH examination ② Eyes: Slit-lamp microscope examination, fundus examination, Goldmann tonometry, and ophthalmological screening
8	Microwave and radio wave	(1)Occupational and exposure history taking (2)History taking related to major target organs (3)Laboratory tests and examinations ① Nervous system: History taking related to nervous system conditions, paying attention to nervous system signs	Laboratory tests and examinations ① Nervous system: Neurobehavioral testing, psychological testing, and neurologic examination ② Reproductive system: Estrogen (females), luteinizing hormone, follicle-stimulating hormone, and testosterone (males) ③ Eyes: Slit-lamp microscope examination, fundus examination,

		② Reproductive system: History taking about reproductive system symptoms ③ Eyes: History taking about related symptoms	Goldmann tonometry, and ophthalmological screening
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2. Test items of occasional medical examinations for any workers suspected of having occupational asthma or occupational dermatitis

No.	Harmful agent	Primary test items	Secondary test items
1	Asthma inducers	(1) Occupational and exposure history taking (2) History taking related to major target organs (3) Laboratory tests and examinations Respiratory system: Examination paying attention to asthma	Laboratory tests and examinations Respiratory system: Serial peak expiratory flow rate monitoring during periods of work activity, chest radiography (posteroanterior and lateral), and non-specific airway hypersensitivity testing
2	Skin abnormality inducers	(1) Occupational and exposure history taking (2) History taking related to major target organs (3) Laboratory tests and examinations Skin: Examination paying attention to the types, priming shapes and distribution of skin lesions, dermatographism, Nikolsky's sign etc.	Laboratory tests and examinations Skin: Skin patch testing

[Table 14] <Amended July 12, 2010>

The Standards for Staffing, Facilities and
Equipment of Special Medical Examination Providers
(referred to in Article 102)

1. Staffing standards
 - a. One or more of industrial medicine physicians under the Medical Service Act; provided, however, that if the number of workers requiring special medical examination exceeds 10,000 one industrial medicine physician shall be added for every additional 10,000.
 - b. Two or more registered nurses under the Medical Services Act
 - c. One or more of medical laboratory technician under the Medical Technicians, etc. Act
 - d. One or more of medical radiation technologists under the Medical Technicians, etc. Act
 - e. One or more of any person who has majored in chemistry, chemical engineering, pharmaceutical science, or occupational health, or any person who has acquired an industrial engineer license in the field of industrial hygiene management
2. Facility standards
 - a. Examination rooms
 - b. Soundproof rooms(for audiometry purposes)
 - c. Medical laboratories
 - d. X-ray radiography rooms
3. Equipment standards
 - a. Visual function analyzers
 - b. Audiometers(excluding audio checkers)
 - c. Microscopes
 - d. White blood cell differential counters
 - e. Water baths
 - f. Centrifuges
 - g. Hepatitis testing equipment
 - h. Scales(capable of measuring 0.01milligram or less)
 - i. Photoelectric photometers(not required if devices offering better performance are maintained)
 - j. X-ray units(capable of taking indirect and direct shots)
 - k. Automated blood cell counters
 - l. Automated blood chemistry(biochemistry) analyzers, or devices necessary for liver function testing, blood chemistry testing, and kidney function testing
 - m. Pulmonary function testers
 - n. Refrigerators

- o. Atomic absorption spectrometers (AAS) or devices offering comparable or better performance
- p. Gas chromatography or devices offering comparable or better performance; provided, however, that if an in-house medical service provider intends to obtain or has obtained as a special medical examination provider, such provider may elect not to maintain any of devices as set forth in o or p, depending on whether certain harmful agents are generated at the applicable workplace.

4. Miscellaneous standards

Any organization that has passed the medical examination and analysis capability assessment as conducted by the Minister of Employment and Labor under Article 43 (9) of the Act

* Note:

1. If the applicable organization intends to obtain or has obtained designation as a designated monitoring service provider under Article 86 or a safety and health surveyor under Article 128, and maintains any items of equipment as set forth in items h, i, o or p of subparagraph 3, then such items of equipment may be shared in consideration of analysis capacity etc.
2. If the applicable organization has contracted any other organization that has passed the medical examination and analysis capability assessment under Article 43 (9) of the Act to analyze biomarkers, such organization may elect not to maintain the personnel as set forth in subparagraph 1 e, 3 o and 3 p.

[Table 14-2] <Amended Mar. 3, 2011>

Persons to Be Issued Health Management Pocketbooks
(referred to in Article 108)

Cl.	Activities subject to issuance	Subject workers
1	Manufacturing or handling of β -naphthylamine or its salts(including formulations containing more than 1 percent by weight of the substance)	Any person who has been engaged in the work activity for three months or more
2	Manufacturing or handling of benzidine or its salts (including formulations containing more than 1 percent by weight of the substance)	Any person who has been engaged in the work activity for three months or more
3	Manufacturing or handling of beryllium or its compounds(including formulations containing more than 1 percent by weight of the substance) or any other substance containing beryllium(only where the percentage by weight of the compound containing beryllium exceeds 3 percent)	Any person who has been engaged in the manufacturing or handling and has chronic nodular opacities in both lungs caused by beryllium
4	Manufacturing or handling of bis-chloromethyl ether(including formulations containing more than 1 percent by weight of the substance)	Any person who has been engaged in the work activity for three years or more
5	a. Manufacturing of asbestos or asbestos textile products	Any person who has been engaged in the work activity for three months or more
	b. Any of the activities of: 1) manufacturing products containing asbestos(other than asbestos textile products); 2) cutting or otherwise processing products containing asbestos(only those products containing asbestos in excess of 1 percent; hereinafter the same shall apply); 3) disposing, removing or repairing asbestos sprayed on facilities, equipment or buildings; or 4) disposing, removing or repairing insulations or fire-resistant cladding containing asbestos in excess of 1 percent	Any person who has been engaged in the work activity for one year or more
	c. disposing, removing or repairing asbestos cement, asbestos friction products, asbestos gasket products or any other products containing asbestos included in facilities, equipment or buildings	Any person who has been engaged in the work activity for ten years or more
	d. Where the worker has been engaged in two or more activities as set forth in item b and c	Any person for whom the results of the following formula exceeds 120: (the number of months for which the person stayed engaged in any activity as set forth in item

		b)×10+(the number of months for which the person stayed engaged in any activity as set forth in item c)
6	Manufacturing (only where benzotrichloride is manufactured by solar chlorination) or handling of benzotrichloride	Any person who has been engaged in the work activity for three years or more
7	<ul style="list-style-type: none"> a. Excavation of stone, sand, clay, minerals or rocks (excluding anything containing water content; hereinafter referred to as "rocks etc.") using powered equipment in mining shafts b. Any activities performed where rocks etc. are broken, crushed or grated in mining shafts c. Any activities performed where rocks etc. are loaded or unloaded to or from construction vehicles or stacked d. Any activities performed where rocks etc. are loaded or unloaded to or from conveyors (excluding movable conveyors) e. Any activities performed where rocks or minerals are carved or finished using powered equipment within a building f. Any activities performed where rocks or minerals are carved by spraying abrasives within a building g. Any activities performed where rocks, minerals or metals are ground, cast or extracted or metals are cut using powered equipment within a building h. Any activities performed where rocks etc., carbon raw materials or aluminum foil are broken, crushed or grated i. Any activities performed where cement, titanium, powdered minerals, carbon raw materials, carbon products, aluminum, or titanium oxides are packaged within a building j. Any activities performed where powered minerals, carbon raw materials, or any other materials containing such substances are mixed, blended or sprayed within a building k. Any of the following activities performed where raw materials are mixed within a building: <ul style="list-style-type: none"> 1) mixing raw materials in any process of manufacturing glass or enamel products, or pouring raw materials or mixtures into a melting furnace(excluding any activities of mixing raw materials in water); 2) any activities performed in a kiln or where within any process of manufacturing ceramic ware, refractories, earthenware or abrasives products, raw materials or works-in-progress are mixed or, or works-in-progress are loaded or stacked (excluding any activities performed where works-in-progress are finished by pouring 	Any person who has been engaged in the work activity for three years or more and deemed to have pneumoconiosis(excluding any person who has been issued a health management pocketbook under the Act on the Prevention of Pneumoconiosis and Protection, etc. of Workers Suffering from Pneumoconiosis)

	<p>or shaping raw materials or products are unloaded and stacked in any process of manufacturing ceramic ware, or any activities performed where raw materials are mixed in water); or</p> <p>3) any activities performed where, in any process of manufacturing carbon products, carbon raw materials are mixed or shaped and works-in-progress are put into furnaces or works-in-progress or products are taken out of furnaces</p> <p>l. Any activities performed where raw materials are shaped using powered equipment to manufacture refractory briks or tiles within a building</p> <p>m. Any of the following activities performed where works-in-progress or products are finished using powered equipment within a building:</p> <p>1) any activities performed in a kiln or where within any process of manufacturing ceramic ware, refractories, earthenware or abrasives, raw materials or works-in-progress are mixed or, or works-in-progress are loaded or stacked (excluding any activities performed where works-in-progress are finished by pouring or shaping raw materials or products are unloaded and stacked in any process of manufacturing ceramic ware, or any activities performed hwere raw materials are mixed in water); or</p> <p>2) any activities performed where, in any process of manufacturing carbon products, carbon raw materials are mixed or shaped and works-in-progress are inserted into furnaces or works-in-progress or products are drawn out from furnaces</p> <p>n. Any activities performed where, within a building, molds are dismantled, sand molds are smashed, sand is brushed off, molding sand is recycled or mixed using powered equipment, or cast products are tipping.</p> <p>o. Any activities performed where metal is melt-sprayed without using molded metal melt-sprays within a building</p>	
8	<p>a. Polymerizing PVC, or separating water from PVC suspension using uncovered centrifuges</p> <p>b. Maitaining petrochemical equipment used to manufacture or using PVC</p>	Any person who has been engaged in the work activity for four years or more
9	Handling or manufacturing chromic or dichromic acids or their salts(including formulations containing more than 1 percent by weight of the substance) by extracting the substance from ores	Any person who has been engaged in the work activity for four years or more

10	Calcinating or refining in any process of manufacturing arsenic trioxide, or refining ores containing more than 3 percent by weight of any compounds containing arsenic	Any person who has been engaged in the work activity for five years or more
11	Handling or manufacturing nickel (including nickel carbonyl) or its compounds by extracting the same from ores	Any person who has been engaged in the work activity for five years or more
12	Handling or cadmium or its compounds by extracting the same from ores	Any person who has been engaged in the work activity for five years or more
13	a. Manufacturing or using benzene (petrochemical industry only) b. Maintaining petrochemical equipment used to manufacture or using benzene	Any person who has been engaged in the work activity for six years or more
14	Manufacturing smelting cokes or smelting gas furnaces (only where the activities are performed on top of the coke furnace or gas furnace or in the close vicinity of the coke furnace)	Any person who has been engaged in the work activity for six years or more

[Table 15] <Amended Mar. 3, 2011>

Required Attachments to the Harm and Hazard Prevention Plan
(referred to in Article 121 (2))

1. Project overview
 - a. Project overview(in the form of Schedule 45)
 - b. Drawings indicating particulars surrounding the work site and the relationship to its surroundings(including details of buried materials)
 - c. Drawings and documents indicating erections and the machinery and equipment used
 - d. Baseline schedule
 - e. An overview of the use of any new technologies designated and published under Article 18 of the Construction Technology Management Act, if any, or the use of any new construction methods used for the first time within the country, if any, with the exception of, however, any new technologies of using new or different materials
2. Safety and health management plan
 - a. Plan for the use of funds for occupational safety and health management(in the form of Schedule 46)

* The details for each item shall be furnished.
 - b. Organization chart for the health management organization, and the safety and health training plan
 - c. PPE provision plan(in the form of Schedule 47)
 - d. Methods for communicating and evacuating in the event of any danger of accidents
3. Harm and hazard prevention plan for each type of work

Project	Type of work	Attachments
Construction of buildings, man-made structures etc. under Article 120 (2) 1	a. Installation of falsework b. Excavation and blasting c. Erection of structures d. Erection of steel structures e. Finish work f. Installation of electrical and mechanical equipment g. Other work(dismantling work etc.)	a. Overview of work b. Harmful or hazardous factors and accident prevention plan for each type of work
Furnishing and installation work for walk-in freezer or refrigeration facilities whose total floor space under Article 120 (2) 2	a. Installation of falsework b. Erection of structures c. Piping work d. Finish work e. Installation of electrical and mechanical equipment f. Other work	
Construction of bridges etc. under Article 120 (2) 3	a. Installation of falsework b. Excavation and blasting c. Lower part construction d. Upper part construction e. Paving work	

Construction of tunnels etc. under Article 120 (2) 4	<ul style="list-style-type: none"> a. Installation of falsework b. Excavation and blasting c. Erection of structures d. Other work
Construction of dams etc. under Article 120 (2) 5	<ul style="list-style-type: none"> a. Installation of falsework b. Excavation and blasting c. Dam building work d. Installation of electrical and mechanical equipment e. Other work
Excavation work under Article 120 (2) 6	<ul style="list-style-type: none"> a. Installation of falsework b. Excavation and blasting c. Sheathing timbering d. Backfill work e. Other work

4. Work environment preparation plan

- * This plan shall be prepared separately from the harm and hazard prevention plan for each type of work
 - a. Protective measures for the type of work generating dust and noise
 - b. Hygiene facility installation and management measures (cafeterias, bathrooms, washrooms etc.)
 - c. Plan for providing medical examinations for workers
 - d. Plan for installing lighting facilities
 - e. Plan for installing ventilation facilities
 - f. The usage of each type of hazardous materials; a plan for safe work when such materials are stored, retained or used

[Table 15-2] <Amended Jan. 26, 2012>

Criteria for a Contractor Using In-house Review and Verification; Methods for Review and Verification

(referred to in Articles 121 (5), 121 (6) and 124 (2))

1. Criteria for a contractor using in-house review and verification

The construction contractor shall be of a size as prescribed by the Minister of Employment and Labor or larger and fall within the lower twenty percent in terms of such industrial accident rate for the immediately following year as calculated in accordance with Table 1; provided, however, that any contractor shall be immediately excluded from the designation as contractor using in-house review and verification in the event of any accident resulted in three or more simultaneous deaths (excluding any accident under subparagraphs 3 d 4) a), 3 d 4) b) and 3 e of Table 1; hereinafter the same shall apply), or excluded in the immediately following year in the event of any accident resulted in two or more simultaneous deaths.

2. Methods for in-house review and verification

- a. One or more of the following persons who is also an officer or employee of the contractor or an independent professional shall be ensured to participate in the in-house review:
 - 1) any occupational safety consultant (specializing in construction safety only);
 - 2) any professional construction safety engineer; or
 - 3) any certified construction safety engineer (including any person who has acquired an industrial safety engineer license or higher and practiced three years or longer in the field of construction safety) who has completed twenty eight hours or more of the intensive course for the review of harm and hazard prevention plans as provided by the Agency.
- b. Any person falling within the scope of the staffing standards as set forth in item a shall be ensured to participate in the in-house verification.
- c. Any employer who has completed an in-house verification shall prepare and maintain at the applicable workplace the results of the in-house verification of the harm and hazard prevention plan in the form of Schedule 26-9.

[Table 16] <Amended Mar. 3, 2011>

The Standards for Staffing, Facilities and Equipment of General Safety and Health Surveyors
(referred to in Article 127)

1. Staffing standards

Safety survey	Health survey
<ul style="list-style-type: none"> a. One or more of any occupational safety consultant or professional safety engineer specializing in mechanical, electrical, or chemical engineering b. One or more of construction safety consultants or professional construction safety engineers c. Two or more of any person who has acquired a certified industrial safety engineer license or higher d. One or more of any person who has acquired a certified mechanical engineer license or higher e. One or more of any person who has acquired a certified electrical engineer license or higher f. One or more of any person who has acquired a certified chemical engineer license or higher g. One or more of any person who has acquired a certified construction safety engineer license or higher 	<ul style="list-style-type: none"> a. One or more of any physician, industrial hygiene consultant, or professional industrial hygiene engineer (the physician shall meet the staffing standards for special medical examination providers as set forth in Table 14) b. Two or more analyzers (any person who has majored in chemistry, chemical engineering, pharmaceutical science, or occupational health, or any person deemed to have academic qualifications equivalent to or surpassing such qualifications) c. Two or more certified engineers specializing in industrial hygiene management (one or more of any person who has acquired a certified industrial hygiene management engineer license or higher, and one or more of any person who has acquired an industrial engineer license in the field of industrial hygiene management or higher)

2. Facility standards

- a. Safety survey: Offices and equipment rooms
- b. Health survey: Work environment counseling rooms, work environment monitoring preparation rooms and analysis labs

3. Equipment standards

- a. Safety survey: Equipment required for a safety surveyor under Table 16-2
- b. Health survey: Equipment required for a health surveyor under Table 17

4. Sharing of equipment

If the applicable organization intends to obtain or has obtained designation as a designated monitoring service provider under Article 86 or a special medical examination provider under Article 103, and maintains any items of equipment as set forth in subparagraph 3 h through 3 r of Table 17, then such items of equipment may be shared in consideration of analysis capacity etc.

[Table 16-2] <Amended Aug. 7, 2009>

The Standards for Staffing, Facilities and Equipment of Health Surveyors
(referred to in Article 127)

No.	Type	Staffing standards	Facilities and equipment standards	Applicable line of industry
1	Common requirements		1. Offices 2. Equipment rooms	
2	Non-construction safety surveyor	<ol style="list-style-type: none"> 1. One or more of any occupational safety consultant or professional safety engineer specializing in mechanical, electrical, or chemical safety 2. Two or more of any person who has acquired a certified industrial safety engineer license or higher 3. One or more of any person who has acquired a certified mechanical engineer license or higher 4. One or more of any person who has acquired a certified electrical engineer license or higher 5. One or more of any person who has acquired a certified chemical engineer license or higher 	<ol style="list-style-type: none"> 1. Revolution meters 2. Non destruction tester by automatic testing 3. Material Strength Tester 4. Vibration meters 5. Standard pressure gauges 6. Insulation resistance meters 7. Multimeters 8. Industrial endoscopes 9. Durometers 10. Oxygen indicators 11. Thickness gauges 12. Gas concentration meters 13. Flammable gas detector tubes 14. Water pressure testers 15. Standard pressure gauges 16. Ground resistance meters 17. Instrument Tester 18. Static charge meters 19. Static electrometers 20. Pressure differential meters 	All operations (excluding any construction operations)
3	Construction safety surveyor	<ol style="list-style-type: none"> 1. One or more of any occupational safety consultant or professional safety engineer specializing in construction safety 2. Two or more of any person who has acquired a certified construction safety engineer license or higher 3. Two or more of any person who has acquired an industrial engineer license in the field of construction safety or industrial safety 	<ol style="list-style-type: none"> 1. Gas concentration meters 2. Oxygen indicators 3. Material Strength Tester 4. Vibration meters 	Construction operations

[Table 17] <Amended Mar. 3, 2011>

The Standards for Staffing, Facilities and Equipment of Health Surveyors
(referred to in Article 127)

1. Staffing standards

Staffing \ Cl.	Number	Qualification
Physician, industrial hygiene consultant, or professional industrial management engineer	1 person or more	The physician shall meet the staffing standards for special medical examination providers as set forth in Table 14.
Analyzer	2 persons or more	Any person who has majored in chemistry, chemical engineering, pharmaceutical science, or occupational health, or any person deemed to have academic qualifications equivalent to or surpassing such qualifications
Certified industrial hygiene engineer	2 persons or more	One or more of any person who has acquired a certified industrial hygiene management engineer license or higher, and one or more of any person who has acquired an industrial engineer license in the field of industrial hygiene management or higher

(Ref.) The number of persons shall be for every 120 workplaces covered by the surveyor.

2. Facility standards

- a. Work environment counseling rooms
- b. Work environment monitoring preparation rooms and analysis labs

3. Equipment standards

- a. Sample collectors for dust, certain chemicals, organic solvents, and toxic gases
- b. Sets of detectors and gas and steam meters
- c. Dust monitors
- d. Noise dosimeters and sound level meters capable of octave analysis
- e. Devices capable of measuring air temperature, humidity and current, radiant heat, and hazardous rays
- f. Oxygen indicators
- g. Carbon monoxide meters
- h. Atomic absorption spectrometers
- i. Gas chromatography
- j. Ultraviolet and visible light spectrometers
- k. Microscopes
- l. Scales (capable of measuring 0.01 milligram or less)
- m. Water purification units
- n. Dryers

- o. Refrigerators and freezers
- p. Draft chambers
- q. Testing bench for chemicals
- r. Equipment used for ventilation or catalytic water treatment purposes
- s. Pitot tubes and other equipment used to test the performance of local ventilation facilities

4. Sharing of facilities and equipment

If the applicable organization intends to obtain or has obtained designation as a designated monitoring service provider under Article 86 or a special medical examination provider under Article 103, and maintains any facilities as set forth in subparagraph 2 or any items of equipment as set forth in subparagraphs 3 h through 3 r, then such facilities or items of equipment may be shared in consideration of analysis capacity etc.

[Table 20] <Amended Jan. 26, 2012>

Criteria for Administrative Sanctions

(referred to in Article 143-2)

1. General criteria

- a. If two or more violations have been committed, the more stringent criterion shall be applicable; if the criteria warrants suspension of activities, the period of suspension shall be the sum of: the period warranted by the most stringent criterion; plus one half of the period warranted by each of the other criteria.
- b. Any administrative sanction criterion depending on the number of violations shall be applicable to the same violations within the last two years.
- c. Any suspension of activities(or business) may be extended if the violation giving rise to the suspension does not cease to exist after the expiry of the suspension.
- d. Designation etc. shall be revoked if activities are performed within the period of suspension of activities (or business) or if any person subjected to suspension of activities(or business) on three occasions or more within the last two years falls within the scope of suspension of activities(or business) again.
- e. If the violation is limited to an area covered by the violator and if it is deemed appropriate to impose a sanction exclusive within such area, the sanction may be imposed exclusively within the area(partial revocation of designation etc. or suspension of certain activities).
- f. For the first violation only, the violator may be ordered to take corrective measures in lieu of suspension of activities warranted by individual criterion if the level of violation is deemed mild and if the violation may be corrected within a short period of time.
- g. For any violation not listed for any criterion, sanction shall be imposed in reference to a similar violation listed.
- h. If a safety/health management service provider is to be ordered to suspend its activities due to any mild violation limited to certain client workplaces, then the sanction, for the first violation only, may be imposed with respect to such certain workplaces only.
- I. Suspension of activities imposed against any accident prevention consulting organization may be imposed with respect to the suspension of signing of new consulting contracts only.

2. Individual criteria

Violation	Criteria for administrative sanctions		
	1st violation	2nd violation	3rd violation
a. Safety management service provider (referred to in Article 15-2 (1) of the Act)			

1) Where the provider has made misrepresentation or committed any other deceptive practice to obtain the designation	Designation revoked		
2) Where the provider has conducted activities during a period of suspension	Designation revoked	Activities suspended for six months	Designation revoked
3) Where the provider has failed to meet any requirement for designation	Activities suspended for three months		
4) Where the provider has conducted activities in violation of requirements for designation	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
5) Where the provider has received service fees without providing safety management services or prepared false documents related to the services	Activities suspended for three months	Activities suspended for six months	Designation revoked
6) Where the provider has refused to provide safety management services without just cause	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
7) Where the provider has caused difficulties in the contractual safety management services or neglected to provide such services			
a) Where the provider has neglected to provide services for a client workplace on three occasions or more within the last one year	Activities suspended for one month	Activities suspended for two months	Activities suspended for three months
b) Where any person failing to meet the staffing standards has provided the contractual services	Activities suspended for three months	Activities suspended for six months	Designation revoked
c) If the rate of occupational accidents of all client workplaces at the end of the immediately preceding year has, from the rate at the end of the year preceding such immediately preceding year, increased by:			
(1) 30 percent or more but less than 50 percent;	Activities suspended for one month		
(2) 50 percent or more but less than 70 percent; or	Activities suspended for two months		
(3) 70 percent or more	Activities suspended for three months		
d) Where a serious accident has occurred to any client workplace due to any negligent technical consulting for safety measures during the year (excluding, however, any accident occurring on business trips taken outside the workplace, any accident occurring while performing any activity that had not been performed during three visit periods immediately preceding such accident, and any accident occurring due to		Activities suspended for one month	Activities suspended for three months

the failure by the employer to take any such measures against the cause of the accident as instructed in technical consulting)			
8) Where the provider has otherwise violated the Act or any ordinance thereof			
a) Where the provider has failed to maintain or falsely prepared any documents to be maintained	Activities suspended for one month	Activities suspended for two months	Activities suspended for three months
b) Where the provider has impeded, refused or evaded the instructions or supervision by relevant public officials	Activities suspended for three months	Activities suspended for six months	Designation revoked
c) Where the provider has received any pecuniary benefits other than the fees prescribed by the Minister of Employment and Labor	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
d) Where the provider has been ordered to take corrective measures under subparagraph 1 f on three occasions or more within the last one year	Activities suspended for one month	Activities suspended for two months	Activities suspended for three months
b. Health management service provider (referred to in Article 16 (3) of the Act) The administrative sanctions against safety management service providers shall be applicable <i>mutatis mutandis</i> with the exception of item a 7) c).			
c. Accident prevention consulting organization (referred to in Article 30 (6))			
1) Where the organization has made misrepresentation or committed any other deceptive practice to obtain the designation	Designation revoked		
2) Where the organization has conducted activities during a period of suspension	Designation revoked		
3) Where the organization has failed to meet any requirement for designation	Activities suspended for three months	Activities suspended for six months	Designation revoked
4) Where the organization has conducted activities in violation of requirements for designation	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
5) Where the organization has refused to provide accident prevention consulting services without just cause	Activities suspended for three months	Activities suspended for six months	Designation revoked
6) Where the organization has caused difficulties in the accident prevention consulting services or neglected to provide such services in any of the following cases:			
a) where the organization has neglected to provide services for a client workplace on three occasions or more within the last one year;	Activities suspended for one month	Activities suspended for two months	Activities suspended for three months
b) where any person failing to meet the staffing standards has provided the	Activities suspended for	Activities suspended for	Designation revoked

consulting services; or	three months	six months	
c) where the provider has unjustly received service fees without providing consulting services.	Activities suspended for three months	Activities suspended for six months	Designation revoked
d) Where the direct cause of any serious accident occurring at a client workplace is deemed to negligent consulting services	Activities suspended for one month	Activities suspended for two months	Activities suspended for three months
7) Where the organization has otherwise violated the Act or any ordinance thereof			
a) Where the organization has failed to maintain or falsely prepared any documents to be maintained	Activities suspended for one month	Activities suspended for two months	Activities suspended for three months
b) Where the organization has impeded, refused or evaded the instructions or supervision by relevant public officials	Activities suspended for three months	Activities suspended for six months	Designation revoked
c) Where the organization has been ordered to take corrective measures under subparagraph 1 f on three occasions or more within the last one year	Activities suspended for one month	Activities suspended for two months	Activities suspended for three months
d. Basic training provider for the construction sector (referred to in Article 32-3 (1))			
1) Where the provider has made misrepresentation or committed any other deceptive practice to obtain registration;	Registration revoked		
2) Where the provider has conducted activities during a period of suspension	Registration revoked		
3) Where the provider has failed to meet any requirement for designation	Activities suspended for three months	Activities suspended for six months	Registration revoked
4) Where the provider has conducted activities in violation of requirements for registration	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
5) Where the provider has refused to provide basic training services without just cause	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
6) Where the provider has falsely prepared any documents on basic training for the construction sector	Activities suspended for three months	Activities suspended for six months	Registration revoked
7) Where the provider has received service fees without providing basic training for the construction sector	Activities suspended for three months	Activities suspended for six months	Registration revoked
8) Where the provider has been in compliance with the manner of training prescribed under the Ordinance of the Ministry of Employment and Labor pursuant to Article 31-2 (3) of the Act	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
e. Job training provider for managers et al. (referred to in Article 32-3 of the Act)			
1) where the provider has made misrepresentation or committed any other deceptive practice to obtain	Registration revoked		

registration;			
2) Where the provider has conducted activities during a period of suspension	Registration revoked		
3) Where the provider has failed to meet any requirement for designation	Activities suspended for three months	Activities suspended for six months	Registration revoked
4) Where the provider has conducted activities in violation of requirements for registration	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
5) Where the provider has refused to provide job training services without just cause	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
6) Where the provider has falsely prepared any documents on job training	Activities suspended for three months	Activities suspended for six months	Registration revoked
7) Where the provider has received service fees without providing job training	Activities suspended for three months	Activities suspended for six months	Registration revoked
8) Where the provider has been in compliance with the manner of training prescribed under the Ordinance of the Ministry of Employment and Labor pursuant to Article 32 (4) of the Act	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
f. Revocation etc. of safety certification (referred to in Article 34-3 (1))			
1) where the person has made misrepresentation or committed any other deceptive practice to obtain the certification	Safety certification revoked		
2) Where the subject machinery, apparatus etc. that has been safety-certified no longer meet the safety certification standards			
a) where the machinery, apparatus etc. no longer meet the safety certification standards	Order to take remedial measures and prohibition from using safety certification marks	Safety certification revoked	
b) where the person subjected to an order to take remedial measures and prohibited from using safety certification marks continues to fail to meet the safety certification standards at the expiry of the six-month period of prohibition	Safety certification revoked		
3) where the person has refused, evaded or impeded the verification as set forth in Article 34 (5) of the Act without just cause	Use of safety certification marks prohibited for three months	Use of safety certification marks prohibited for six months	Safety certification revoked
g. Safety certification organization (referred to in Article 34-5 (4) of the Act)			

1) Where the organization has made misrepresentation or committed any other deceptive practice to obtain designation;	Designation revoked		
2) Where the organization has conducted activities during a period of suspension	Designation revoked		
3) Where the organization has failed to meet any requirement for designation	Activities suspended for three months	Activities suspended for six months	Designation revoked
4) Where the organization has conducted activities in violation of requirements for designation	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
5) Where the organization has refused to provide safety certification services without just cause	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
6) Where the organization has falsely prepared any documents on safety certification	Activities suspended for three months	Activities suspended for six months	Designation revoked
7) Where the organization has been in incompliance with the manner of safety certification as prescribed under the Ordinance of the Ministry of Employment and Labor	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
8) Where the organization has caused difficulties in the contractual safety certification services or neglected to provide such services			
a. Where any person failing to meet the staffing standards has provided the safety certification services	Activities suspended for three months	Activities suspended for six months	Designation revoked
b. Where a serious accident has occurred due to any negligently conducted assessment of whether any workplace meets the safety certification standards	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
c. Where a serious accident has occurred due to any negligence with respect to any assessment for exemption from safety certification or any international treaties on safety certification	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
9) Where the organization has impeded, refused or evaded the instructions or supervision by relevant public officials	Activities suspended for three months	Activities suspended for six months	Designation revoked
h. Safety inspection organization (referred to in Article 36 (10) of the Act)			
1) Where the organization has made misrepresentation or committed any other deceptive practice to obtain designation;	Designation revoked		
2) Where the organization has conducted activities during a period of suspension	Designation revoked		
3) Where the organization has failed to meet any requirement for designation	Activities suspended for three months	Activities suspended for six months	Designation revoked
4) Where the organization has conducted activities in violation of requirements	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months

for designation			
5) Where the organization has refused to provide safety inspection services without just cause	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
6) Where the organization has falsely prepared any documents on safety inspection	Activities suspended for three months	Activities suspended for six months	Designation revoked
7) Where the organization has been in incompliance with the manner of safety inspection as prescribed under the Ordinance of the Ministry of Employment and Labor	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
8) Where the organization has caused difficulties in the contractual safety inspection services or neglected to provide such services			
a. Where any person failing to meet the staffing standards has provided the safety inspection services	Activities suspended for three months	Activities suspended for six months	Designation revoked
b. Where a serious accident has occurred due to any negligently conducted verification of whether any workplace meets the safety inspection standards	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
9) Where the organization has impeded, refused or evaded the instructions or supervision by relevant public officials	Activities suspended for three months	Activities suspended for six months	Designation revoked
I. Prohibition from using self-regulatory safety check marks (referred to in Article 35-3 of the Act)			
○ Where the subject machinery, apparatus etc. subject to self-regulatory safety check no longer meet the self-regulatory safety check standards	Ordered to take remedial measures and prohibited from using self-regulatory safety check marks for up to six months until self-the regulatory safety check standards are met		
j. Revocation of the recognition of a voluntary inspection program (referred to in Article 36-2 (4) of the Act)			
1) Where the employer has made misrepresentation or committed any other deceptive practice to obtain recognition of its voluntary inspection program;	Recognition of the voluntary inspection program revoked		
2) Where the employer has obtained recognition of its voluntary inspection program but failed to conduct inspection	Remedy ordered	Remedy ordered	Recognition of the voluntary inspection program

3) Where the employer has failed to conduct inspection in accordance with the recognized voluntary inspection program	Remedy ordered	Remedy ordered	revoked Recognition of the voluntary inspection program
4) Where a person having the qualifications as set forth in Article 36-2 (2) of the Act or a designated inspection organization has not conducted inspection	Remedy ordered	Remedy ordered	revoked Recognition of the voluntary inspection program
k. Revocation of designation of a designated inspection organization (referred to in Article 36-2 (7) and Article 28-9 of the Decree)			revoked
1) Where the organization has made misrepresentation or committed any other deceptive practice to obtain the designation	Designation revoked		
2) Where the organization has conducted activities during a period of suspension	Designation revoked		
3) Where the organization has failed to meet any requirement for designation	Activities suspended for three months	Activities suspended for six months	Designation revoked
4) Where the organization has provided inspection services in violation of requirements for designation	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
5) Where the organization has received service fees without providing inspection services	Activities suspended for three months	Activities suspended for six months	Designation revoked
6) Where the organization has falsely prepared any documents on inspection	Activities suspended for three months	Activities suspended for six months	Designation revoked
7) Where the organization has refused to provide inspection services without just cause	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
8) Where the organization has omitted any inspection items or been in incompliance with the inspection methods	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
9) Where the organization has been in incompliance with inspection standards for inspection results or failed to present opinions on safety measures according to such results	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
l. Registration and support service provider (Article 36-3 (3) of the Act)			
1) Where the provider has made misrepresentation or committed any other deceptive practice to obtain registration	Registration revoked		
2) Where the provider no longer meets registration requirements	Support restricted for one year Registration revoked	Registration revoked	
3) Where safety certification is revoked under Article 34-3 (1) 1 of the Act			
m. Manufacturing and use permits for harmful			

substances(referred to in Article 38 (5) of the Act)			
1) Where the person has made misrepresentation or committed any other deceptive practice to obtain the permits	Permits revoked		
2) Where the requirements for permits under Article 38 (2) of the Act are no longer met	Business suspended for three months	Business suspended for six months	Permits revoked
3) Where the person has violated Article 38 (3) of the Act	Business suspended for three months	Business suspended for six months	Permits revoked
4) Where the person has been in incompliance with any order issued under Article 38 (4) of the Act	Business suspended for six months	Permits revoked	
5) Where the person has failed to conduct repairs and take other necessary measures despite that its own inspection has resulted in abnormalities begin discovered	Business suspended for two months	Business suspended for three months	Business suspended for six months
6) Where the person has otherwise violated the Act or any ordinance thereof			
a) where the person has failed to conduct safety inspection of local ventilation devices under Article 36 of the Act;	Business suspended for two months	Business suspended for three months	Business suspended for six months
b) where the person has failed to provide appropriate PPE for any worker handling any substance requiring permits;	Business suspended for two months	Business suspended for three months	Business suspended for six months
c) where the safety rules for any substance requiring permits have not been observed or where any worker handling such substance has continued to work without wearing PPE;	Business suspended for two months	Business suspended for three months	Business suspended for six months
d) where the person has failed to maintain or falsely prepared any documents to be maintained; or	Business suspended for two months	Business suspended for three months	Business suspended for six months
e) where the person has impeded, refused or evaded the instructions or supervision by relevant public officials	Business suspended for four months	Business suspended for six months	Permits revoked
n. Asbestos surveyor(referred to in Article 38-2 (7) of the Act)			
1) Where the surveyor has made misrepresentation or committed any other deceptive practice to obtain the designation	Designation revoked		
2) Where the surveyor has conducted activities during a period of suspension	Designation revoked		
3) Where the surveyor has failed to meet any requirement for designation	Activities suspended for three months	Activities suspended for six months	Designation revoked
4) Where the surveyor has conducted activities in violation of requirements	Activities suspended for	Activities suspended for	Activities suspended for

for designation	one month	three months	six months
5) Where the organization has refused to provide asbestos survey services without just cause	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
6) Where the surveyor has falsely prepared any documents on its asbestos surveys under Article 38-2 (2) of the Act	Activities suspended for three months	Activities suspended for six months	Designation revoked
7) Where the surveyor has been in incompliance with the manner of its surveys and other necessary matters as prescribed by the Ordinance of the Ministry of Employment and Labor pursuant to Article 38-2 (6) of the Act	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
8) Where the surveyor has failed to receive the asbestos survey capability evaluation conducted by the Minister of Employment and Labor under Article 38 (2) of the Act or failed to pass the evaluation	Activities suspended until the surveyor passes an asbestos survey capability evaluation in the future		
9) Where the surveyor has caused any person failing to fall within the scope of Article 80-10 of the Enforcement Regulations to take measurements in violation of Article 38-5 (2) of the Act	Activities suspended for three months	Activities suspended for six months	Designation revoked
10) Where the surveyor has violated the manner of measuring in violation of Article 38-5 (2) of the Act	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
11) Where the surveyor has caused any person not meeting the staffing standards under Article 30-4 of the Decree to conduct its asbestos survey	Activities suspended for three months	Activities suspended for six months	Designation revoked
12) Where the surveyor has impeded, refused or evaded the instructions or supervision by relevant public officials	Activities suspended for three months	Activities suspended for six months	Designation revoked
o. Asbestos disposal and removal service provider (referred to Article 38-4 (6) of the Act)			
1) Where the provider has made misrepresentation or committed any other deceptive practice to obtain registration	Registration revoked		
2) Where the provider has conducted activities during a period of suspension	Registration revoked		
3) Where the provider has failed to meet any requirement for registration	Activities suspended for three months	Activities suspended for six months	Registration revoked
4) Where the provider has conducted activities in violation of requirements for registration	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
5) Where the provider has been sentenced to a fine, imprisonment or a more severe penalty on three occasions or more within the last one year due to	Registration revoked		

the failure to observe the asbestos disposal and removal work standards as prescribed in the Ordinance of the Ministry of Employment and Labor pursuant to Article 38-3 of the Act			
6) Where the provider has made misrepresentation or committed any other deceptive practice in preparing any documents under Article 38-2 (4) of the Act	Activities suspended for three months	Activities suspended for six months	Registration revoked
7) Where the provider has failed to comply with its obligation to file notification or retain documents under Article 38-4 (3) of the Act	Activities suspended for one month	Activities suspended for two months	Activities suspended for three months
8) Where the provider has impeded, refused or evaded the instructions or supervision by relevant public officials	Activities suspended for three months	Activities suspended for six months	Registration revoked
p. Designated monitoring service provider (referred to in Article 42 (10) of the Act)			
1) Where the provider has made misrepresentation or committed any other deceptive practice to obtain the designation	Designation revoked		
2) Where the provider has conducted activities during a period of suspension	Designation revoked		
3) Where the provider has failed to meet any requirement for designation	Activities suspended for three months	Activities suspended for six months	Designation revoked
4) Where the provider has provided work environment monitoring services in violation of requirements for designation	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
5) Where the provider has refused to provide work environment monitoring services without just cause	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
6) Where the provider has falsely prepared any documents on work environment monitoring			
a) where figures have been tampered with; or	Activities suspended for three months	Activities suspended for six months	Designation revoked
b) where any work environment monitoring items have been omitted	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
7) Where the provider has been in incompliance with the manner of work environment monitoring as prescribed in the Ordinance of the Ministry of Employment and Labor pursuant to Article 42 (2) of the Act	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
8) Where the provider has caused difficulties in the contractual work environment monitoring services			
○ Where any person failing to meet the staffing standards has provided the work environment monitoring services	Activities suspended for three months	Activities suspended for six months	Designation revoked
9) Where the provider has otherwise			

violated the Act or any ordinance thereof:			
a) where the provider has failed to maintain or falsely prepared any documents to be maintained;	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
b) where the provider has impeded, refused or evaded the instructions or supervision by relevant public officials; or	Activities suspended for three months	Activities suspended for six months	Designation revoked
c) where the provider has failed to participate in quality control for one year or more or pass quality control evaluation	Activities suspended until the provider passes quality control evaluation		
q. Medical examination provider (referred to in Article 43 (11) of the Act)			
1) Where the provider has made misrepresentation or committed any other deceptive practice to obtain the designation	Designation revoked		
2) Where the provider has conducted activities during a period of suspension	Designation revoked		
3) Where the provider has failed to meet any requirement for designation	Activities suspended for three months	Activities suspended for six months	Designation revoked
4) Where the provider has provided medical examination services in violation of requirements for designation	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
5) Where the provider has omitted any test items or failed to observe any testing methods or implementation procedures as prescribed in the Ordinance of the Ministry of Employment and Labor			
a) where any test items have been omitted;	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
b) where any inspection methods have not been observed; or	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
c) where any implementation procedures have not been observed	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
6) Where the provider has solicited for medical examination or collected unreasonable examination fees	Activities suspended for three months	Activities suspended for six months	Designation revoked
7) Where the provider has failed to pass quality control evaluation	Activities suspended until the provider passes quality control evaluation		
8) Where the provider has drawn false conclusions from medical examinations or falsely prepared any individual medical examination sheets			
a) Where the provider has drawn false conclusions from medical examinations	Designation revoked		

b) Where the provider has falsely prepared any individual medical examination sheets	Activities suspended for six months	Designation revoked	
9) Where any person without qualifications or any person not meeting the standards for designation of medical examination providers as prescribed in the Ordinance of the Ministry of Employment and Labor has conducted medical examination services			
a) Where any person who is not a physician under the Method Services Act has conducted examination or reached a conclusion	Designation revoked		
b) Where any physician who is not an occupational and environmental physician under subparagraph 1 a of Table 14 has conducted examination or reached a conclusion	Activities suspended for three months	Activities suspended for six months	Designation revoked
c) Where any person failing to meet the designation standards has provided any medical examination services other than examination or drawing of conclusions	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
10) Where the provider has refused to provide or discontinued medical examination services without just cause:			
a) where the provider has refused to provide medical examination services; or	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
b) where the provider has discontinued medical examination services	Activities suspended for three months	Activities suspended for six months	Designation revoked
11) Where the provider has impeded or evaded the instructions or supervision by relevant public officials	Activities suspended for three months	Activities suspended for six months	Designation revoked
12) Where the provider has otherwise violated the Act or any ordinance thereof	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
r. Training service provider for applicants for harmful and hazardous work license (referred to in Article 47 (4) of the Act)			
1) Where the provider has made misrepresentation or committed any other deceptive practice to obtain the designation	Designation revoked		
2) Where the provider has conducted activities during a period of suspension	Designation revoked		
3) Where the provider has failed to meet any requirement for designation under Article 4 (1) of the Regulations on Restrictions on Employment for Harmful and Hazardous Work	Activities suspended for three months	Activities suspended for six months	Designation revoked
4) Where the provider has refused to provide training services to any particular person without just cause	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months

5) Where the provider has caused difficulties in the contractual training services due to any shutdown for one months or more without just cause	Designation revoked		
6) Where the provider has otherwise violated the Act or any ordinance thereof or is deemed inappropriate to provide training services due to any other reasons:			
a) where the provider has failed to maintain or falsely prepared any documents to be maintained;	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
b) where the provider has impeded, refused or evaded the instructions or supervision by relevant public officials; or	Activities suspended for three months	Activities suspended for six months	Designation revoked
c) where the provider has received any pecuniary benefits other than the fees prescribed by the Minister of Employment and Labor	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
s. Safety or health surveyor(referred to in Article 49 (4) of the Act)			
1) Where the surveyor has made misrepresentation or committed any other deceptive practice to obtain the designation	Designation revoked		
2) Where the surveyor has conducted activities during a period of suspension	Designation revoked		
3) Where the surveyor has failed to meet any requirement for designation	Designation revoked Activities suspended for three months	Activities suspended for six months	Designation revoked
4) Where the surveyor has provided medical safety and health survey services in violation of requirements for designation	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
5) Where the provider has refused to provide safety and health survey services without just cause	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
6) Where the surveyor has cause difficulties in safety and health survey services:			
a) where any person failing to meet the staffing standards has provided the survey services; or	Activities suspended for three months	Activities suspended for six months	Designation revoked
b) where the surveyor has falsely prepared any safety and health survey reports	Activities suspended for three months	Activities suspended for six months	Designation revoked
7) Where the surveyor has otherwise violated the Act or any ordinance thereof:			
a) where the surveyor has failed to maintain or falsely prepared any documents to be maintained;	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
b) where the surveyor has impeded, refused or evaded the instructions or supervision by relevant public officials; or	Activities suspended for three months	Activities suspended for six months	Designation revoked

c) where the surveyor has received any pecuniary benefits other than the fees prescribed by the Minister of Employment and Labor	Activities suspended for one month	Activities suspended for three months	Activities suspended for six months
t. Occupational safety consultant or occupational hygiene consultant (referred to in Article 52-4 (4) of the Act			
1) Where the consultant falls within the scope of any of items 1 through 5 of Article 52-4 (3) of the Act	Registration revoked		
2) Where the consultant has violated Article 52-6 of the Act	Activities suspended for three months	Activities suspended for six months	Registration revoked

* Please read the form instructions on the reverse side and fill in statements or check the applicable box. (Page 1)

Business	Name of workplace		Project commencement no.	
	Name of work site		Name of branch	
	Line of industry		No. of workers	
	Location			
	Products			
	Workplace category	[] Owner/Host [] Primary contractor [] Secondary contractor [] Misc. information()		
	For construction only	Name of owner or host		Type of work
Progress %		%	Project amount million won	
Overview of accident	Date and time of occurrence		Area (dept.) of occurrence	
Damage incurred	Personal damage () deaths and () injuries		Property damage thousand won	
	Operation stopped on			
Cause and development of accident	Objects or substances causing accident			
	Description of process causing accident			
	Cause and development of accident	* State: the equipment related to the accident, the operation or status of the work process, the acts of the workers (or those involved in the accident), how the accident occurred etc., which must explain “the five Ws and one H” – the who, what, when, where, why, and how.		

210 mm \times 297 mm (recycled paper 60g/m²)]

* The following columns shall be filled in by each person involved in the accident. Please use separate sheets of the form if two or more persons are involved in a single accident.

Person involved in accident	Name		DOB		
	Nationality		Occupation(position)	Gender: [] Male [] Female	
	Employed on [], [] day of year []		Length of period for the current type of duties: [] year(s) and [] month(s)		
	Type of employment	[] Regular [] Temporary [] Casual [] Part-time [] Family [] Outsourced [] Self-employed [] Misc. information()			
	Type of service	[] Regular [] 2 shifts [] 3 shifts [] Misc. information()			

Description of industrial accident	Time of occurrence	[] Regular work [] Break [] Before work [] During commutation [] Holiday duties [] Overtime duties [] Misc. information()				
	Description of process performed	Ordinarily				
		At the time of accident				
	Type of occurrence	Objects/materials that inflicted damage	Type of injuries (or names of diseases)	Injured body part (or part affected by disease)		
	Type of work	[] By single person [] By multiple persons (persons)	Protective equipment	[] Applicable [] Not applicable (Equipment:)	Personal protective equipment	[] Applicable [] Not applicable (Equipment:)
	Loss of work days	[] Death [] Injury		[] Work resumed on day of accident [] Impossible to resume work on day of accident		
No. of days of not reporting for duty		No. of days of work restrictions				

Employer

(Signature or seal)

Worker representative
(or person involved in accident)

(Signature or seal)

Form Instructions

1. No. of workers: State the monthly average number of all workers including regular, temporary, casual, and family employees, trainees and any other workers paid during the previous year.
2. Name of the project owner or the host employer: State only where the workplace hiring or managing the workers involved in the accident is a contractor.
3. The type of the project and progress percentage: State the progress percentage of the work of the project owner (host employer), not that of any individual contracted work.
 - a. The type of the project: Refers to the type of the work that was being undertaken at the time of the accident. (e.g. apartment buildings, bridges, tunnels, subway, electric railroad, road, petrochemical plants, dams, embankments etc.)
 - b. Progress percentage: The percentage progress of all processes (not that of individual processes) at the site of work at the time of accident.
4. The area (department) of occurrence: State the area, place or department where the accident first occurred.
 - * The above place may not coincide with the place where the worker involved in the accident was working if the worker was affected by an accident occurring at an adjacent workshop. In such case, state the name of the adjacent shop.
5. Personal damage, property damage, operation stop: State the current status of the workplace where damage was caused by a single accident (other than any other workplaces concurrently damaged).
6. Protective equipment, and personal protective equipment: Check "Applicable" if the equipment is related to the accident or work and may contribute to the prevention or mitigation of the accident, and state the applicable equipment. Otherwise, check "Not applicable".
7. Type of work: The affected worker may have been working by oneself even if the worker is paired with any other worker for the work.
 - (e.g. For any work performed by a pair of two workers moving objects using an elevator, one could load cargo on the first floor and the other could unload it on the fifth.)
8. Objects or substances causing accident: Refers to the equipment, facility or material that directly caused the accident.
 - (e.g. A press, crane, belt conveyor, breaker, roller, hand-held tools, floor, roof, ethylene oxide, paint thinner, person, dog etc.)
9. Type of occurrence: Refers to the type of occurrence of the accident, or the phenomenon related to the objects or substances causing accident and injuring the worker.
 - (e.g. fall, drop, fly, entanglement, toppling over, roll-over, contact, exposure to abnormal temperatures, exposure to harmful or hazardous substances, fire, explosion, electric shocks, etc.)
10. Description of the process causing the accident
 - a. Work process performed: State the work process that is a root cause of the accident (which may be a work process performed by the worker's colleague, not the worker himself).
 - (e.g. a melting process, welding process, molding process, cutting process, moving process, reaction process, process of installing or repairing machinery or buildings etc.)
 - b. Description of work performed: State the detail of the work or the act that served as the immediate cause of the accident in the work process.
 - (e.g. pouring or extraction of raw or processed materials, assembly, connecting, dismantling, operation of machinery or vehicles, loading or unloading, stacking, breaks, travels etc.)
11. The length of period for the current type of duties: State the sum of all periods for which the worker performed the current type of duties (same or similar duties) (or the applicable work activity in the case of disease) including any periods with any other employers.
12. The type of employment The type of the employment agreement, either express or implied, signed between the worker and the employer or any other person, where the items refer to the following meanings:
 - a. Regular: Any person whose employment agreement remains effective for an unspecified period of time, or one year or more
 - b. Temporary: Any person employed for a specified period of time, which is one month or more but less than one year (seasonal employment or a short-term contracted position)
 - c. Casual: Any person who is employed and paid wages or salaries for a period of less than one month or travels around performing services and getting paid
 - d. Part-time: Any person paid on a part-time basis, not on a day-count basis
 - e. Family: Any family member of the employer who is not paid
 - f. Outsourced: Any person who is employed by an outsourcing employer under the Dispatched Workers Protection Act but works at the workplace of the host employer
 - g. Self-employed: Any person who is self-employed or a partner of a self-employed person and has not employed workers
 - h. Miscellaneous information: Trainees, outsourced workers et al.
13. Type of service: Refers to how the worker performs duties, including hours of work (not referring to the situation in which the worker was working at the time of accident)
 - a. Regular: Refers to the manner in which the worker reports for duty around 9:00 a.m. and leaves around 6:00 p.m.
 - b. 2 shifts or 3 shifts: Refers to 2 or 3 shifts of workers are committed to the same work activity (not applicable if the worker is transferred to another shift every period of one month or more.)
 - c. Miscellaneous information: Refers to duties performed during fixed night (or evening) hours.
14. Loss of work days: State the number of work days lost, which ends on the day on which the worker returns to the shop or work restrictions are placed, including the date of the accident. If the worker has not returned or restrictions continue on the day of the survey, the calculation should be based on the estimated day on which the worker is expected to return (in reference to the physician's medical opinion).
 - * The number of work days shall be based on the loss of work capability of the affected worker, regardless of whether the shop is operated.
 - a. The number of days of not reporting for duty: Refers to the number of days for which the worker is unable to work, including any absence (the number of days for which worker had been unable to work since the accident, including any holidays)
 - b. The number of days of work restrictions: The number of days for which the worker was unable to perform services in a normal manner due to hospital treatment as an outpatient or any other medical care. In other words, "work restrictions" refers to reduced volume of work, reduced work hours, or a switch to another work activity.
15. Occupation (position): State the ordinary occupation (or job class) and the position, not the activities that were being performed at the time of accident.
 - a. Occupation (job class): Office worker, electrician, plumber, bricklayer, plasterer, insulation worker, concrete worker, carpenter, welder, machinery installer/assembler, landscaping worker, forklift driver, building maintenance personnel, cleaning-related laborer, dancer, cook, etc.

- b. Position: Associate, chief, foreman, assistant manager, department manager, deputy general manager, etc.
16. Type of injuries (or names of diseases) State the physical characteristics or type of injuries caused by the accident.
(e.g. fracture, amputation, bruise, abrasion, poisoning/asphyxiation, burn, electric shock, cerebral concussion, hypertension, pneumoconiosis, carpal tunnel syndrome, etc.)
17. Injured body part (or part affected by disease): State the body part damaged by the accident.
(e.g. head, eyes, neck, shoulders, arms, hands, fingers, back, spine, torso, legs, feet, toes, whole body, internal organ (digestive, nervous, circulatory, respiratory, excretory) etc.)
* If there are two or more types or areas of injury , state the most severe one first.
18. Objects/materials that inflicted damage Refers to the machine, object or material that directly inflicted damage on the affected worker (refer to the examples of the objects or substances causing accident).
19. Work process performed ordinarily and its description: State the activities or work process ordinarily performed by the affected worker.
* Even driving, construction work, or any other worker activity entailing frequent travels or performed at undefined places may be ordinary worker activity if the type of service is regular.
20. Work process performed at the time of accident and its description: State the activities that was being personally performed by the affected worker at the time of accident, or the state in which the worker was.
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