

# Environmental Policies in Korea

# 2020







## Foreword

The UN and the international community are seeking environmentally sustainable growth so that the present and future generations can enjoy a better life, and they are working together closely to fundamentally solve environmental issues that the world is faced with by cutting greenhouse gas to achieve the target temperature.

In Korea, to guarantee the fundamental right of environmental right, various interest groups encompassing the government, industries, and civic groups are discussing measures to establish a tight-knit environment safety network in the manufacturing, distribution and storage process of chemical substances, to implement society-wide efforts to substantially reduce fine dust, and to set and accomplish nation-wide greenhouse gas reduction goals to transition into a green society. Such measures are being materialized through the enactment and amendment of laws in the National Assembly.

Some foreign-invested companies may find such changes in domestic and foreign environmental policies somewhat burdensome, but if companies proactively respond to environmental issues, it will help promote their eco-friendly image and strengthen global competitiveness.



In this regard, the Foreign Investor Support Center of KOTRA published *Environment Policies in Korea 2020* to provide information on environment policies that foreign-invested companies should know when establishing or operating factories and a summary of environmental laws covering authorization and permission requirements.

This book covers a wide range of subjects, including authorization and permission requirements applied to environmental media such as air and water, comprehensive license for large pollutant-emitting facilities, measures to be taken by business places that should obtain environmental authorization and licenses, and regulations that business places handling hazardous chemicals or requiring authorization or permission to use chemicals should comply with.

I hope that this book will be a helpful guide to foreign-invested companies in understanding Korea's environment policies and establishing an eco-friendly economic system.

**January 2020**  
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Head of the Foreign Investor Support Center



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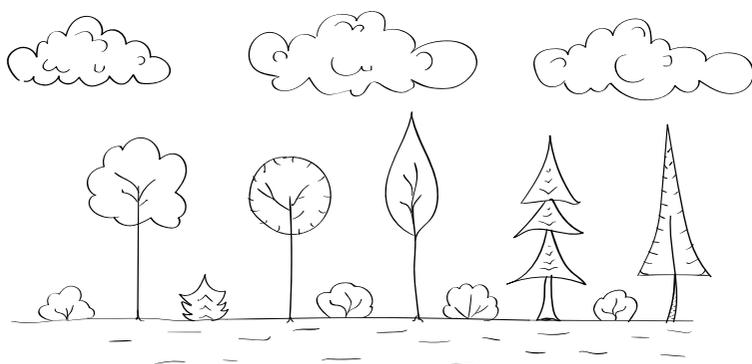
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# I.

## Companies Discharging Environmental Pollutants

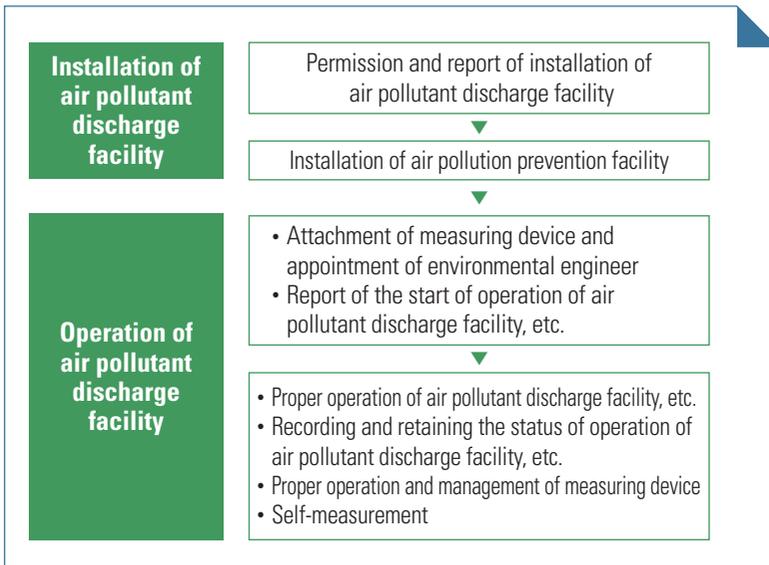
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# 01 Installation and operation of facilities discharging air pollutants

## 01 Summary

- A person who is intending to install an air pollutants discharge facility shall obtain the permission of the mayor or the provincial governor or report such to the mayor or the provincial governor.
- When installing an air pollutant discharge facility after obtaining permission for installation or reporting the installation of the facility, it is necessary to install an air pollution prevention facility in order to keep the air pollutants discharged from the facility within the acceptable standards stipulated in Article 16 of the Clean Air Conservation Act.
- For the operation of the air pollutant discharge facility and air pollution prevention facility, the start of operation shall be reported to the mayor or the provincial governor in advance after attaching the measuring device and appointing the environmental engineer.
- The air pollutant discharge facility and the air pollution prevention facility shall be operated properly at all times, and the status of their operation shall be accurately recorded and retained.



## 02 Terminology

Term	Definition
Air pollutants	The gases or particles in the air designated as the cause of air pollution by the order of the Ministry of Environment after screening and evaluation pursuant to Article 7 of the Clean Air Conservation Act (Article 2, Subparagraph 1 of the Clean Air Conservation Act, Article 2 and Attached Table No. 1 of its Enforcement Rules)
Air pollutants subject to watch for hazard	The air-polluting materials recognized to be subject to continuous measurement, monitoring, or observation for the likelihood of inflicting harm on human health or growth and development of animals and plants by the order of the Ministry of Environment after screening and evaluation pursuant to Article 7 of the Clean Air Conservation Act (Article 2, Subparagraph 1-2 of the Clean Air Conservation Act, Article 2-2 and Attached Table No. 1-2 of its Enforcement Rules)
Specified hazardous air pollutant	The materials among the air pollutants subject to watch for hazard and recognized - by the order of the Ministry of Environment - to require the management of discharge into the air due to their possible harmfulness to human health or growth and development of animals and plants directly or indirectly by long-time intake or exposure even at low concentration after screening and evaluation according to Article 7 of the Clean Air Conservation Act (Article 2, Subparagraph 9 of the Clean Air Conservation Act, Article 4 and Attached Table No. 2 of its Enforcement Rules)
Air pollutant discharge facility	The facility, machine, device, and other objects defined by the order of the Ministry of Environment to be discharging air pollutants into the air (Article 2, Subparagraph 11 of the Clean Air Conservation Act, Article 5 and Attached Table No. 3 of its Enforcement Rules)
Air pollution prevention facility	The facility defined by the order of the Ministry of Environment to eliminate or reduce the air pollutants emitted from the air pollutant discharge facility by combustion control, etc. (Article 2, Subparagraph 12 of the Clean Air Conservation Act, Article 6 and Attached Table No. 4 of its Enforcement Rules)

## 01 Installation and operation of facilities discharging air pollutants

### 03 Installation of air pollutant discharge facility

#### A. Permission and report of installation of air pollutant discharge facility

- A person who is intending to install an air pollutant discharge facility shall report such to the mayor or the provincial governor by submitting related documents.

##### ▶ Related regulations

- Article 23 (1) of the Clean Air Conservation Act
- Article 11 (1)(3) of the Enforcement Decree of the Clean Air Conservation Act
- Article 25 of the Enforcement Rules of the Clean Air Conservation Act

##### ▶ Facilities subject to permission and report

Classification	Details
Permission	<ul style="list-style-type: none"><li>• An air pollutant discharge facility generating the specified hazardous air pollutant beyond the standards stipulated by the order of the Ministry of Environment<sup>1)</sup></li><li>• An air pollutant discharge facility installed in a special measure area designated and announced according to Article 38 of the Framework Act on Environmental Policy<sup>2)</sup> (hereinafter referred to as "special measure area") (except the air pollutant discharge facility installed in a Class 5 places of business and which is not an object of permission above)</li></ul>
Report	<ul style="list-style-type: none"><li>• All air pollutant discharge facilities except those subject to permission</li></ul>

##### ▶ Required documents

- Application for permission of air pollutant discharge facility/ Statement (Attached Form No. 2 of the Enforcement Rules of the Clean Air Conservation Act)
- Detailed statement predicting the quantity of raw materials used (including fuel), production quantity of products, pollutants, etc.

1) Article 24-2 and Attached Table No. 8-2 of the Enforcement Rules of the Clean Air Conservation Act

2) Public notice of comprehensive measures for the designation of special measure area for air conservation and reduction of air pollution in the same area (Ministry of Environment Public Notice No. 2018-23)

- Detailed statement of installation of air pollutant discharge facility and air pollution prevention facility
- General map of the air pollution prevention facility
- Yearly maintenance plan of air pollution prevention facility
- Documents related to exemption from installation of air pollution prevention facility (for exemption from installation of prevention facility)
- Documents related to the design and construction of self-prevention facility (for the design and construction of self-prevention facility)
- Documents related to the installation of joint prevention facility (for installation of joint prevention facility)
- Documents related to the use of fuel besides low-sulfur oil (for use of fuel besides low-sulfur oil)
- Documents related to application for approval of use of solid fuel (for approval of use of solid fuel)
- Detailed statement of the facility discharging volatile organic compounds and facility reducing and preventing discharge (for the facility discharging volatile organic compounds)
- Data related to the calculation of quantity of air pollutants
- Documents attached at the time of permission or report of the facility discharging water pollutants and generating noise and vibration (when the facility is newly installed)
- Documents attached at the time of application for change of permission or report of the facility discharging water pollutants and generating noise and vibration (if applicable)

## B. Permission and report of change of installation of air pollutant discharge facility

- It is necessary to obtain permission for change of important matters in the installation of air pollutant discharge facility and make a report for change of other minor matters.
- In addition, it is necessary to make a report for the change of matters reported when installing an air pollutant discharge facility.
- Related documents shall be submitted to the mayor or the provincial governor for permission or report of change of air pollutant discharge facility.

### ► Related regulations

- Article 23 (2), (3) of the Clean Air Conservation Act
- Article 11 (4) of the Enforcement Decree of the Clean Air Conservation Act



## Installation and operation of facilities discharging air pollutants

○ Article 26 and Article 27 (1)-(3) of the Enforcement Rules of the Clean Air Conservation Act

### ► Facilities subject to permission and report of change

	Changes to be permitted/reported	When to apply (report)
Permission of change	Expansion of 50% or more of the total or cumulative sum of the size of air pollutant discharging facilities that obtained permission for installation or change or whose change was reported (The total or cumulative sum of the size of air pollutant discharging facilities shall be measured for each vent.)	Before the change
	Expansion of 30% or more of the total or cumulative sum of the size of air pollutant discharging facilities whose installation or change is permitted or whose change is reported for the facility discharging specific hazardous air pollutants beyond the standards stipulated by the order of the Ministry of Environment <sup>3)</sup> (The total or cumulative sum of the size of the air pollutant discharge facility shall be calculated for each vent.)	Before the change
	Addition of use of the air pollutant discharge facility whose installation or change is permitted	Before the change
Report of change	Expanding, replacing, or closing the air pollutant discharge facilities connected to the same vent (except the expansion, replacement, or closure of less than 10% if the changed quantity of air pollutants is within the treatment capacity of the air pollution prevention facility and it does not exceed the limit of installation according to other laws)	Before the change
	Discharging a new air pollutant other than the air pollutants permitted or reported for the air pollutant discharge facility	Within 30 days of the day of occurrence
	Expansion, replacement, or closure of air pollution prevention facility	Before the change
	Change of raw materials or fuel used (except change into low-sulfur fuel, etc.)	Before the change

<sup>3)</sup> Article 24-2 and Attached Table No. 8-2 of the Enforcement Rules of the Clean Air Conservation Act

	Changes to be permitted/reported	When to apply (report)
Report of change	Change of the name of the places of business or representative	Within 2 months of the day of occurrence
	Leasing an air pollutant discharge facility or an air pollution prevention facility	Within 30 days of the day of occurrence
	Changing the matters requiring permission (report) and daily operating hours stated in the installation permit of the air pollutant discharge facility	Before the change

► **Required documents**

- Application for change of permission of air pollutant discharge facility / Statement of change (Attached Form No. 4 of the Enforcement Rules of the Clean Air Conservation Act)
- Original permit for the installation of air pollutant discharge facility or certificate of installation of air pollutant discharge facility
- Documents proving the contents of change
- General map of air pollution prevention facility and maintenance plan (for change of air pollution prevention facility)
- Documents related to exemption from installation of air pollution prevention facility (for exemption from installation of prevention facility)
- Detailed statement predicting the quantity of raw materials used (including fuel), production quantity of products, pollutants, etc. (for application for change of permission)
- Documents related to the design and construction of self-prevention facility (for the design and construction of self-prevention facility)
- Documents related to the installation of joint prevention facility (for installation of joint prevention facility)
- Documents related to the use of fuel besides low-sulfur oil (for use of fuel besides low-sulfur oil)
- Documents related to application for approval of use of solid fuel (for approval of use of solid fuel)
- Documents attached at the time of permission or report of the facility discharging water pollutants and generating noise and vibration (when the facility is newly installed)
- Documents attached at the time of application for change of permission or report of the facility discharging water pollutants and generating noise and vibration (if applicable)



## Installation and operation of facilities discharging air pollutants

### <Note> Classification of Places of Business

- The Minister of Environment shall classify places of business into Types I through V according to the quantity of pollutants emitted from the emission facilities of a relevant place of business in order to ensure the efficient installation and management of emission facilities. (Article 25 of the Clean Air Conservation Act)
- **Criteria for classification of places of business** (Article 13 and Attached Table No. 1-3 of the Enforcement Decree of the Clean Air Conservation Act)

Place of business	Quantity of generated pollutants
Class 1	Places of Business generating a total of 80 tons or more of air pollutants yearly
Class 2	Places of Business generating a total of 20 tons or more of air pollutants yearly
Class 3	Places of Business generating a total of 10 tons or more of air pollutants yearly
Class 4	Places of Business generating a total of 2 tons or more of air pollutants yearly
Class 5	Places of Business generating a total of less than 2 tons of air pollutants yearly

※ “Air pollutants generation quantity” is the quantity of dust, sulfur oxides, and nitrogen oxides before passing the air pollution prevention facility as calculated according to the method of calculation in Article 42 of the Enforcement Rules of the Clean Air Conservation Act.

### <Note>

- **Exemption from installation of air pollution prevention facility** (Article 23 (4) and Proviso of Article 26 (1) of the Clean Air Conservation Act)
  - Exempted from Installation of an air pollution prevention facility is exempted if the criteria for exemption from installation of air pollution prevention facility are met.
  - In this case, related documents shall be submitted at the time of permission or report of installation of air pollutant discharge facility.
- **Design and construction of self-prevention facility** (Article 23 (4) and Proviso of Article 28 of the Clean Air Conservation Act)

- An air pollution prevention facility shall be designed and constructed by a professional environmental facility construction company, except when the business operator is intending to design and construct the prevention facility by himself/herself.
- In this case, related documents shall be submitted at the time of permission or report of installation of air pollutant discharge facility.
- **Installation of joint prevention facility** (Article 23 (4) and Article 29 (1) of the Clean Air Conservation Act)
  - Business operators located in an industrial complex or an area with a concentration of places of business may install an air pollution prevention facility jointly for the joint treatment of air pollutants discharged from air pollutant discharge facilities.
  - In this case, related documents shall be submitted at the time of permission or report of installation of air pollutant discharge facility.
- **Use of fuel besides low-sulfur oil** (Article 23 (4) and Proviso of Article 41 (3) of the Clean Air Conservation Act)
  - A facility permitted or reported as a facility using the fuel exceeding the standard for sulfur content may supply, sell, or use the fuel exceeding the standard for sulfur content.
  - In this case, related documents shall be submitted at the time of permission or report of installation of air pollutant discharge facility.
- **Approval for use of solid fuel** (Article 23 (4) and Proviso of Article 42 of the Clean Air Conservation Act)
  - Business operators located in an area prohibited to use solid fuel may not use solid fuel. Note, however, that the use of solid fuel is allowed with the approval of the mayor or the provincial governor if the level of air pollutants discharged from the facility concerned is lower than the standard for allowance of discharge of air pollutants.
  - In this case, related documents shall be submitted at the time of permission or report of installation of air pollutant discharge facility.
- **Installation of volatile organic compounds discharge facility** (Change) report (Article 44 (1) of the Clean Air Conservation Act, Proviso of Article 59-2 (2), and Proviso of Article 60 (2) of its Enforcement Rules)
  - A person who is intending to install a volatile organic compounds discharge facility in a special measure area, etc. shall report such to the mayor or the provincial governor or the mayor of a metropolitan city.
  - In this case, the reporting above can be replaced by the submission of application for (change of) permission of installation of air pollutant discharge facility or report (of change) if the volatile organic compounds discharge facility is an air pollutant discharge facility.



## Installation and operation of facilities discharging air pollutants

- **Counted permission, etc. by other laws and regulations** (Article 24 (1), (5) of the Clean Air Conservation Act)
  - An air pollutant discharge facility whose installation or change is permitted or reported shall be regarded as having received permission for installation or change by the following laws and regulations related to air pollutant discharge facilities:
    - Permission or report of installation or change of discharge facility according to Article 33 (1)-(3) of the Water Environment Conservation Act
    - Permission or report of installation or change of discharge facility according to Article 8 (1) or (2) of the Noise and Vibration Control Act
  - To obtain fictitious permission, etc. for the above, it is necessary to submit the related documents stipulated in the relevant law when applying for permission of installation of air pollutant discharge facility.

### C. Installation of air pollution prevention facility

- A person who is intending to install or change an air pollutant discharge facility after obtaining permission or making a report for installation or change of the facility shall install the air pollution prevention facility in order to keep the air pollutants discharged from the facility within the acceptable standards.

▶ **Related regulation** Article 26 (1) of the Clean Air Conservation Act

- Note, however, that places of business meeting the standard for exemption may be exempted from installing the air pollution prevention facility. In this case, it is necessary to submit evidentiary documents to the mayor or the provincial governor.

▶ **Related regulations** Proviso of Article 26 (1) of the Clean Air Conservation Act, Article 14 of its Enforcement Decree, and Article 28 of its Enforcement Rules

▶ **Standard for exemption from installation of air pollution prevention facility**

- Where the quantity of air pollutants discharged from the function or process of the air pollutant discharge facility is always less than the allowable standard
- Where it is possible to treat the air pollutants properly by a method other than the installation of an air pollution prevention facility

▶ **Required documents**

- Explanatory materials about the function, process, and raw materials used (including supplementary materials) at the air pollutant discharge facility and

characteristic of the fuel

- Objective literature or other testing and analysis data proving that the quantity of air pollutants discharged from the air pollutant discharge facility is always less than the allowable standard

- Business operators located in an industrial complex or an area with a concentration of places of business may install an air pollution prevention facility jointly for the joint treatment of the air pollutants discharged from air pollutant discharge facilities. In this case, the representative of the joint prevention facility operating body shall submit related documents to the mayor or the provincial governor in advance.

▶ **Related regulation** Article 29 (1) of the Clean Air Conservation Act, Article 32 (1) of its Enforcement Rules

▶ **Required documents**

- Location map of joint prevention facility (scale of 1:25,000)
- Detailed statement of installation and drawings of the joint prevention facility
- Detailed statement of installation of air pollutant discharge facility at each places of business and forecast of quantity of discharged air pollutants
- Documents showing the quantity of raw materials used and production quantity of products and process chart of each places of business
- Installation map and detailed statement of the connection pipe from the places of business to the joint prevention facility
- Agreement on the operation of the joint prevention facility

## 04 Operation of air pollutant discharge facility

### A. Attachment of measuring devices

- It is necessary to attach a measuring device to check the quantity of air pollutants discharged from the air pollutant discharge facility and examine compliance with the acceptable standards for discharge and proper operation of the air pollution prevention facility.



## Installation and operation of facilities discharging air pollutants

- ▶ **Related regulation** Article 32 (1) of the Clean Air Conservation Act; Article 17 (1), (4) and Attached Table No. 2, Article 17 (5) and Attached Table No. 3 of its Enforcement Decree

- ▶ **Kinds of measuring device**

- ① Integrating wattmeter
- ② Smokestack tele-monitoring system (including flow and current meter, thermometer and data collector; hereinafter referred to as "smokestack tele-monitoring system")

- ▶ **Places of business, etc. subject to the attachment of measuring device**

- ① Integrating wattmeter
  - Places of Business subject to attachment: All places of business from Class 1 to Class 5
  - Facilities subject to attachment: Air pollution prevention facility installed at air pollutant discharge facilities excluding the following facilities:
    - Air pollution prevention facilities connected with the vent equipped with the smokestack tele-monitoring system
    - An air pollution prevention facility whose condition of operation can be checked without attaching an integrating wattmeter through the use of the same power source equipment by both air pollution prevention facility and air pollutant discharge facility
    - An air pollution prevention facility that has to be in operation at all times for the collection of raw materials or products
  - Attachment method: Refer to Subparagraph 2, Attached Table No. 2 of the Enforcement Decree of the Clean Air Conservation Act.
- ② Smokestack tele-monitoring system
  - Places of business subject to attachment: Class 1, Class 2, and Class 3 Places of Business
  - Air pollutant discharge facilities subject to attachment and measurement items: Refer to Subparagraph 1, Attached Table 3 of the Enforcement Decree of the Clean Air Conservation Act.
  - Object of exemption from attachment: Refer to Item 2, Attached Table 3 of the Enforcement Decree of the Clean Air Conservation Act.
  - Attachment time: Refer to Item a of Subparagraph 3, Attached Table No. 3 of the Enforcement Decree of the Clean Air Conservation Act.
    - To be attached by the date of report of the start of operation. If there are 10 or more vents in the same places of business to be equipped newly with the smokestack tele-monitoring system, however, all the devices shall be

- attached within six months of the date of start of operation.
- Deferment of attachment: Refer to Item c of Subparagraph 3, Attached Table No. 3 of the Enforcement Decree of the Clean Air Conservation Act.

## B. Appointment of environmental engineer

- An environmental engineer shall be appointed for the normal operation and management of air pollutant discharge facility and air pollution prevention facility.

▶ **Related regulation** Article 40 (1) of the Clean Air Conservation Act, Article 39 (1), (2) and Attached Table No. 10 of its Enforcement Decree

▶ **Time of appointment of environmental engineer**

- If the air pollutant discharge facility is installed for the first time: At the time of report of start of operation
- If the environmental engineer is appointed as replacement: Within five days of occurrence (If it is difficult to appoint a Grade 1 or a Grade 2 environmental engineer, however, an environmental engineer may be appointed according to the qualification for Class 4 and Class 5 Places of Business within 30 days.)

▶ **Qualification standard for environmental engineer for each place of business**

Place of business	Qualification standard
Class 1	One or more engineers holding the technical qualification of air pollution engineer or higher
Class 2	One or more engineers holding the technical qualification of air pollution industrial engineer or higher
Class 3	One or more engineers holding the technical qualification of air pollution industrial engineer or higher, environmental craftsman or who have worked in the area of air environment for three years or longer
Class 4	A person who received permission for installation of air pollutant discharge facility or reported such or one or more employees of the places of business concerned working in the air pollutant discharge facility and air pollution prevention facility as appointed by the person who received permission for the installation of air pollutant discharge facility or reported the installation of the facility
Class 5	



## Installation and operation of facilities discharging air pollutants

- Note**
- 1) If the average daily work hours for a month in a Class 1 Place of Business and a Class 2 Place of Business are 17 hours or longer, there should be two or more environmental engineers in the places of business. In this case, the rest of the engineers may be replaced with the environmental engineer(s) meeting the qualification for Class 3 Places of Business except one main engineer.
  - 2) If the total quantity of air pollutants of all the Places of Business of a joint prevention facility is equivalent to the size of Class 4 Places of Business or Class 5 Places of Business, there should be environmental engineer(s) corresponding to Class 3 Places of Business.
  - 3) If a Class 4 Place of Business and a Class 5 Place of Business discharge pollutants containing the specified hazardous air pollutants beyond the standard stipulated in Article 11 (1) 1 of the Enforcement Decree of the Clean Air Conservation Act, there should be environmental engineer(s) corresponding to Class 3 Places of Business.
  - 4) The places of business exempted from the installation of prevention facility and the places of business treating air pollutants at a joint prevention facility may have environmental engineer(s) corresponding to Class 5 Places of Business.
  - 5) Places of Business installed with only ordinary boiler and places of business generating only dust among air pollutants may have environmental engineer(s) corresponding to Class 5 Places of Business.
  - 6) An air environmental engineer who has a certificate of qualification of water quality environmental engineer according to the Water Environment Conservation Act and/or a certificate of qualification of noise and vibration environmental engineer according to the Noise and Vibration Control Act may concurrently hold multiple positions.

### C. Report of start of operation of air pollutant discharge facility, etc.

- If a person is intending to operate an air pollutant discharge facility or an air pollution prevention facility after finishing installation or change<sup>4)</sup>, it is necessary to report the start of operation of the facility to the mayor or the provincial governor by submitting related documents.

4) Applicable to a change beyond a certain size if the change is made after reporting

▶ **Related regulation**

- Article 30 (1) of the Clean Air Conservation Act
- Article 15 of the Enforcement Decree of the Clean Air Conservation Act
- Article 34 (1) of the Enforcement Rules of the Clean Air Conservation Act

▶ **Size of the object subject to the report of start of operation by the report of change of air pollutant discharge facility**

- Expansion of 20 percent or more of the permitted or reported air pollutant discharge facility

▶ **Required documents**

- Discharge facility and prevention facility operation start report (Attached Form No. 5 of the Enforcement Rules of the Clean Air Conservation Act)
- Original permit for installation of air pollutant discharge facility or certificate of installation of air pollutant discharge facility

- It is possible to test-operate some of the facilities whose start of operation is reported for 30 days from the date of start of operation.

▶ **Related regulation**

- Article 30 (2) of the Clean Air Conservation Act
- Article 16 of the Enforcement Decree of the Clean Air Conservation Act
- Article 35 of the Enforcement Rules of the Clean Air Conservation Act

▶ **Facilities available for test operation**

- Air pollutant discharge facility equipped with flue gas desulfurizer
- Air pollutant discharge facility equipped with flue gas denitrifier
- Other air pollutant discharge facilities recognized by the Minister of Environment to require test operation for a certain period after installation or repair of the prevention facility

## D. Adequate operation of air pollutant discharge facility, etc.

- An air pollutant discharge facility and an air pollution prevention facility shall not be operated inadequately.

- ▶ **Related regulation** Article 31 (1) of the Clean Air Conservation Act



## Installation and operation of facilities discharging air pollutants

### ▶ Prohibited conducts when operating the air pollutant discharge facility and air pollution prevention facility

- Not operating the air pollution prevention facility when operating the air pollutant discharge facility or mixing air with the air pollutants discharged from the air pollutant discharge facility in order to reduce the pollution level (except when deemed necessary by the mayor or the provincial governor for the prevention of accidents such as fire or explosion)
- Installing an air conditioning apparatus or an additional discharge pipe for the discharge of air pollutants instead of through the air pollution prevention facility (except when deemed necessary by the mayor or the provincial governor for the prevention of accidents such as fire or explosion)
- Neglecting the air pollutant discharge facility or air pollution prevention facility that are leaking air pollutants due to corrosion or abrasion without justifiable reason
- Neglecting the failure or damage of the machine, apparatus, etc. attached to the air pollution prevention facility without justifiable reason
- Discharging air pollutants beyond the allowable standards by not operating the air pollutant discharge facility or air pollution prevention facility normally

- In addition, it is required to accurately record and keep the status of operation of air pollutant discharge facility and air pollution prevention facility.

### ▶ Related regulation Article 31 (2) of the Clean Air Conservation Act, Article 36 (1)-(3) of its Enforcement Rules

### ▶ Matters regarding keeping records per size of places of business

- At Class 1, Class 2, and Class 3 Places of Business, records shall be kept by the electronic method decided and announced by the President of the National Institute of Environmental Research<sup>5)</sup>. Note, however, that a places of business transmitting the results of measurement of all vents automatically to the smokestack tele-monitoring system control center (hereinafter referred to as "Control Center") by attaching automatic smokestack measurement devices may transmit the data concerned instead.
- Class 4 and Class 5 Places of Business shall keep records in the discharge

5) Public announcement on the operation of discharge facility and prevention facility and keeping of electronic records on self-measurement (Public Announcement No. 2018-43 of the National Institute of Environmental Research)

facility and prevention facility operation register<sup>6)</sup> (Attached Form No. 7 of the Enforcement Rules of the Clean Air Conservation Act) every day and keep the records for one year from the final date of recording.

► **Matters to be recorded**

- Operation hours of the facility
- Quantity of discharge of air pollutants
- Matters regarding self-measurement
- Manager and operator of the facility
- Other important matters regarding the operation of the facility

## E. Adequate operation and management of measuring device

- The attached measuring device shall not be operated inadequately. The standards for the operation and management of the measuring device shall be observed strictly for continuous maintenance of the reliability and accuracy of the data measured by the measuring device.

► **Prohibited conducts when operating a measuring device** (Article 32 (3) of the Clean Air Conservation Act)

- Not operating a measuring device intentionally or not conducting normal measurement when operating an air pollutant discharge facility
- Neglecting a measuring device that is not operating normally due to corrosion, abrasion, failure, or damage without justifiable reason
- Damaging a measuring device intentionally
- Omitting the results of measurement or making false results of measurement by manipulating the measuring device

► **Standards for operation and management of measuring device**

Article 32 (4) of the Clean Air Conservation Act, Article 37 and Attached Table No. 9 of its Enforcement Rules

- Standards for operation and management of integrating wattmeter
  - Attach the integrating wattmeter that received type approval and verification as per the Measures Act
  - Seal the integrating wattmeter to prevent arbitrary manipulation
- Standards for operation and management of smokestack tele-monitoring system
  - Maintain the structure and performance of the smokestack tele-monitoring

6) The records may be kept by an electronic method decided and announced by the President of the National Institute of Environmental Research or by an electronic method using tape, diskette, etc.



## Installation and operation of facilities discharging air pollutants

system to meet the standards for testing of environmental pollution process according to the Environmental Testing and Inspection Act.

- Install the smokestack tele-monitoring system that received type approval or preliminary type approval according to the Environmental Testing and Inspection Act, undergo precision inspection according to the same act, and take measures to notify the Control Center of the results of the precision inspection. (The data collector or the medium data collector satisfying the standards for testing of environmental pollution process according to the same act is considered to have received type approval or precision inspection.)
- Transmit the data measured by the smokestack tele-monitoring system to the Control Center frequently.
- If the thermometer for the gas discharged from the smokestack is newly installed or replaced, it should be calibrated according to the Framework Act on National Standards, and records should be kept for at least three years (among the thermometers installed at incineration facilities, however, the calibration of the thermometer measuring the temperature at the exit of the final combustion chamber shall be replaced by the use of KS products).

### F. Self-measurement

- When operating an air pollutant discharge facility, it is necessary to keep accurate records of measurement through self-measurement of the air pollutants discharged from the facility or by having a measurement agent according to Article 16 of the Environmental Testing and Inspection Act (hereinafter referred to as "measurement agent").

▶ **Related regulations** Article 39 (1) of the Clean Air Conservation Act, Article 52 (3) and Attached Table No. 11 of its Enforcement Rules

▶ **Number and items of self-measurement** The number of measurements differs by the size of the vents and performance of transmission of the measurement results to the Control Center.

Vents		Measurements			Measured item
		Vents of places of business not transmitted to the Control Center	Vents not equipped with smokestack tele-monitoring system among places of business with automatic transmission Control Center		
			Measuring only the rear side of the prevention facility	Measuring the front and rear sides of the prevention facility	
Class 1	Generating 80 tons or more of dust, sulfur oxides, and nitrogen oxides yearly	At least once a week	At least once every 2 weeks	At least once a month	Air pollutants covered by the allowable standards for discharge into the air except fugitive dust
Class 2	Generating 20 tons or more of dust, sulfur oxides, and nitrogen oxides yearly	At least twice a month	At least once a month	At least once every 2 months	
Class 3	Generating 10 tons or more of dust, sulfur oxides, and nitrogen oxides yearly	At least once every 2 months	At least once every 2 months	At least quarterly	
Class 4	Generating 2 tons or more of dust, sulfur oxides, and nitrogen oxides yearly	At least half-yearly	At least half-yearly	At least half-yearly	
Class 5	Generating less than 2 tons of dust, sulfur oxides, and nitrogen oxides yearly	At least half-yearly	At least half-yearly	At least half-yearly	

► **Matters regarding exemption from self-measurement, adjustment of number of measurements, etc.**

Refer to the Note in Attached Table No. 11 of the Enforcement Rules of the Clean Air Conservation Act.

## 02 Installation and operation of fugitive emission facility

### 01 Summary

- A person who is intending to install and operate any equipment or facility discharging air pollutants directly into the air (hereinafter referred to as "fugitive emission facility") instead of discharging them through a smokestack equipped with a smokestack tele-monitoring system in a certain industry type shall report such to the head of the basin environmental office, head of the regional environmental office, or head of the capital area air environmental office.
- In order to change the matters reported for the installation of a fugitive emission facility, it is necessary to report the change to the head of the basin environmental office, head of the regional environmental office, or head of the capital area air environmental office.
- When reporting the installation or change of a fugitive emission facility, it is necessary to observe the standards for the management of the fugitive emission facility for the reduction of fugitive emission of hazardous materials.
- It is necessary to undergo regular inspection by inspection agencies for the confirmation of observance of the standards for the management of fugitive emission facility.

**Installation of  
fugitive emission  
facility**

Report of installation and operation of  
fugitive emission facility

**Operation of  
fugitive emission  
facility**

- Observing the standards for the management of fugitive emission facility
- Regular inspection of fugitive emission facility

## 02 Installation of fugitive emission facility

### A. Report of installation and operation of fugitive emission facility

• A person who is intending to install and operate a fugitive emission facility shall submit the required documents to the head of the basin environmental office, head of the regional environmental office, or head of the capital area air environmental office.

- ▶ **Related regulations** Article 38-2 (1) of the Clean Air Conservation Act, Article 38-2 and Attached Table No. 9-2 of its Enforcement Decree, and Article 51-2 (1) of its Enforcement Rules

▶ **Industries subject to reduction of fugitive emission**

Business	Category
Cokes, briquette, and oil refined products manufacturing business	<ul style="list-style-type: none"> <li>• Crude oil refinery business</li> </ul>
Chemical substances and chemical products manufacturing business (excluding medicine and medical supplies)	<ul style="list-style-type: none"> <li>• Basic petrochemical substances manufacturing business</li> <li>• Synthetic rubber manufacturing business</li> <li>• Synthetic resin and other plastic materials manufacturing business</li> <li>• Adhesive and gelatin manufacturing business</li> </ul>
Primary metal manufacturing business	<ul style="list-style-type: none"> <li>• Iron manufacturing business</li> <li>• Steel manufacturing business</li> <li>• Cold rolling and pressing products manufacturing business</li> <li>• Aluminum rolling, pressing, and elongation products manufacturing business</li> <li>• Steel pipe manufacturing business</li> </ul>
Rubber products and plastic products manufacturing business	<ul style="list-style-type: none"> <li>• Other rubber products manufacturing business</li> <li>• Plastic film, sheet, and plate manufacturing business</li> <li>• Business manufacturing plastic products for coating walls and floors</li> <li>• Plastic bag, envelope, and similar products manufacturing business</li> <li>• Plastic lamination, coating, and other surface treatment products manufacturing business</li> <li>• Other plastic products manufacturing business</li> </ul>

## 02 Installation and operation of fugitive emission facility

Business	Category
Electrical equipment manufacturing business	<ul style="list-style-type: none"> <li>• Battery manufacturing business</li> <li>• Other insulated wire and cable manufacturing business</li> </ul>
Other transportation equipment manufacturing business	<ul style="list-style-type: none"> <li>• Steel shipbuilding business</li> <li>• Ship components manufacturing business</li> <li>• Other shipbuilding business</li> </ul>
Land transportation and pipeline transportation business	<ul style="list-style-type: none"> <li>• Pipeline transportation business</li> </ul>
Warehouse and transportation-related services	<ul style="list-style-type: none"> <li>• Hazardous item storage services</li> </ul>
Metal processing products manufacturing business (excluding machinery and tools)	<ul style="list-style-type: none"> <li>• Iron manufacturing business</li> <li>• Steel manufacturing business</li> <li>• Cold rolling and pressing products manufacturing business</li> <li>• Aluminum rolling, pressing, and elongation products manufacturing business</li> <li>• Steel pipe manufacturing business</li> </ul>
Textile products manufacturing business (excluding clothing)	<ul style="list-style-type: none"> <li>• Fabric and woven cloth dyeing processing business</li> </ul>
Pulp, paper, and paper products manufacturing business	<ul style="list-style-type: none"> <li>• Lamination, synthetic, and special surface treatment paper manufacturing business</li> <li>• Wallpaper and floor paper manufacturing business</li> </ul>
Electronic component, computer, video, sound, and communication equipment	<ul style="list-style-type: none"> <li>• Other electronic component manufacturing business</li> </ul>
Automobile and trailer manufacturing business	<ul style="list-style-type: none"> <li>• Automobile power transmission device manufacturing business</li> <li>• Other automobile parts manufacturing business</li> </ul>

- 1) The industry types in the table above are the industry types defined in the Korean Standard Industrial Classification publicly announced by the commissioner of Statistics Korea according to Article 22 of the Statistics Act.
- 2) For the land transportation and pipeline transportation business and warehouse and transportation-related services, they only apply to reservoir storing and shipping gasoline.

► **Required documents**

- Report on the installation and operation of fugitive emission facility (Attached Form No. 20-2 of the Enforcement Rules of the Clean Air Conservation Act)
- Production process chart and detailed statement of installation of fugitive emission facility
- Detailed statement of objects subject to management at each fugitive emission facility
- Management plan of fugitive emission facility
- List of facilities exempted from the application of facility management standards according to Subparagraph 3, Item a (3) of Attached Table No. 10-2 of the Enforcement Rules of the Clean Air Conservation Act

**B. Report of change of installation and operation of fugitive emission facility**

- It is necessary to make a report for change of matters reported for the installation of fugitive emission facility.
- A person who is intending to report a change of fugitive emission facility shall submit the required documents to the head of the basin environmental office, head of the regional environmental office, or head of the capital area air environmental office.

► **Related regulations**

- Article 38-2 (2) of the Clean Air Conservation Act
- Article 51-2 (3), (4) of the Enforcement Rules of the Clean Air Conservation Act

► **Matters subject to report of change**

	Changes to be reported	When to report
Report of change	Change of the name of the places of business or its representative	Within 30 days of the day of occurrence
	Change of 10% or more of the size of the fugitive emission facility (total capacity or total number of fugitive emission facilities of the same classification at each emission facility according to Item 3 in the attached Table 10-2 of the Clean Air Conservation Act)	Before the change

## 02 Installation and operation of fugitive emission facility

	Changes to be reported	When to report
Report of change	Change of the name of the places of business or its representative	Before the change
	Necessity of change due to mistake in writing, omission, or similar reason	Before the submission of the first inspection report <sup>7)</sup>
	Lease of fugitive emission facility	Within 30 days of the day of occurrence

### ▶ Required documents

- Report of change of installation and operation of fugitive emission facility (Attached Form No. 20-4 of the Enforcement Rules of the Clean Air Conservation Act)
- Original certificate of report of installation and operation of fugitive emission facility
- Documents proving the content of change

## 03 Operation of fugitive emission facility

- When reporting the installation and operation or change of a fugitive emission facility, it is necessary to observe the standards for facility management for the reduction of fugitive emission of hazardous materials.

### ▶ Related regulations

- Article 38-2 (3) of the Clean Air Conservation Act
- Article 51-3 (2) and Attached Table No. 10-2 of the Enforcement Rules of the Clean Air Conservation Act

### ▶ Facility management standards

- (Common standards) general standards, recording standards, and reporting standards
- (Materials subject to management by industry) Applicable materials by industry

7) A report to be prepared and submitted based on the standards for facility management in each industry type according to Subparagraph 1, Item c (1) of Attached Table No. 10-2 of the Enforcement Rules of the Clean Air Conservation Act

- ( I-IV industry types) and common application materials
- (Standards for facility management by industry) Detailed standards in each discharge facility per industry ( I-IV industry types)

- In addition, it is necessary to undergo regular inspection by inspection agencies for confirmation of compliance with the standards for facility management. Moreover, if it is recognized - according to the results of the regular inspection - that improvement measures have to be taken, it is necessary to prepare and submit an improvement plan to the head of the basin environmental office, head of the regional environmental office, or head of the capital area air environmental office and improve the facility concerned.

▶ **Related regulations**

- Article 38-2 (4) of the Clean Air Conservation Act
- Article 51-3 (5) of the Enforcement Rules of the Clean Air Conservation Act

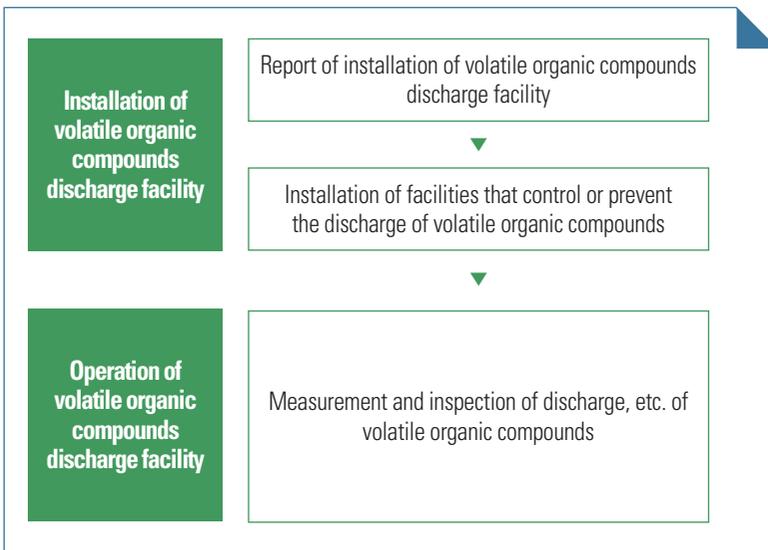
▶ **Content, cycle, and method of regular inspection**

- Refer to Article 38-2 (5) of the Clean Air Conservation Act and Article 51-3 (3) and Attached Table No. 10-3 of its Enforcement Rules.

# 03 Installation and operation of facilities discharging volatile organic compounds

## 01 Summary

- A person who is intending to install a volatile organic compounds discharge facility in an area subject to reporting such installation shall report such to the mayor or the provincial governor or the head of a city with a population of 500,000 or more except a special city, a metropolitan city, or a special self-governing city (hereinafter referred to as "mayor of a large city")
- In order to change the matters reported for the installation of a volatile organic compounds discharge facility, it is necessary to report the change to the mayor, the provincial governor, or the mayor of a large city.
- When installing a volatile organic compounds discharge facility after reporting its installation or change, it is necessary to take measures to prevent damage to the air environment due to the discharge of volatile organic compounds by installing facilities that control or prevent the discharge of volatile organic compounds.
- In order to control the discharge of volatile organic compounds, it is necessary to inspect and measure the discharge of volatile organic compounds, concentration, etc. and record and retain the results of inspection and measurement.



## 02 Terminology

Term	Definition																																					
Volatile organic compound <sup>8)</sup>	Petrochemical products, organic solvents, and other materials among hydrocarbon substances publicly announced by the Minister of Environment after consultation with the head or a related central administrative agency (Article 2, Subparagraph 10 of the Clean Air Conservation Act)																																					
Volatile organic compound discharge facility <sup>9)</sup>	<ul style="list-style-type: none"> <li>Article 44 (1) of the Clean Air Conservation Act, Article 45 (1), (2) of its Enforcement Decree</li> <li>Regulations on the kinds of facilities discharging volatile organic compounds, size of facility, installation of facility that controls and prevents discharge, etc. (Ministry of Environment Public Notice No. 2015-125)</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="background-color: #008000; color: white;">Business</th> <th colspan="2" style="background-color: #008000; color: white;">Discharge facility</th> </tr> <tr> <th style="background-color: #008000; color: white;">Facility</th> <th style="background-color: #008000; color: white;">Size</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="background-color: #e6f2ff;">Oil refinery and petrochemical manufacturing business</td> <td>Crude oil refining and manufacturing facility</td> <td>All facilities</td> </tr> <tr> <td>Storage facility</td> <td>Storage capacity of 40 m<sup>3</sup> or more</td> </tr> <tr> <td>Shipping facility</td> <td>All facilities</td> </tr> <tr> <td rowspan="2" style="background-color: #e6f2ff;">Oil reservoir</td> <td>Storage facility</td> <td>Storage capacity of 20 m<sup>3</sup> or more</td> </tr> <tr> <td>Shipping facility</td> <td>All facilities</td> </tr> <tr> <td rowspan="2" style="background-color: #e6f2ff;">Gas station</td> <td>Storage facility</td> <td>Storage capacity of 20 m<sup>3</sup> or more</td> </tr> <tr> <td>Refueling facility</td> <td>Storage capacity of 20 m<sup>3</sup> or more</td> </tr> <tr> <td style="background-color: #e6f2ff;">Washing facility<sup>10)</sup></td> <td>Washing facility</td> <td>Treatment capacity of 30kg or more (total)</td> </tr> <tr> <td rowspan="4" style="background-color: #e6f2ff;">Organic solvent and paint manufacturing business</td> <td>Reaction facility</td> <td>Capacity of 3 m<sup>3</sup> or more</td> </tr> <tr> <td>Mixing facility</td> <td>Capacity of 3 m<sup>3</sup> or more</td> </tr> <tr> <td>Dilution thinner manufacturing facility</td> <td>Capacity of 5 m<sup>3</sup> or more or 50 horsepower or more</td> </tr> <tr> <td>Facility storing organic solvent, substances containing organic solvent, and oil</td> <td>Storage capacity of 10 m<sup>3</sup> or more</td> </tr> <tr> <td></td> <td>Paint storage facility</td> <td>Storage capacity of 50 m<sup>3</sup> or more</td> </tr> </tbody> </table>	Business	Discharge facility		Facility	Size	Oil refinery and petrochemical manufacturing business	Crude oil refining and manufacturing facility	All facilities	Storage facility	Storage capacity of 40 m <sup>3</sup> or more	Shipping facility	All facilities	Oil reservoir	Storage facility	Storage capacity of 20 m <sup>3</sup> or more	Shipping facility	All facilities	Gas station	Storage facility	Storage capacity of 20 m <sup>3</sup> or more	Refueling facility	Storage capacity of 20 m <sup>3</sup> or more	Washing facility <sup>10)</sup>	Washing facility	Treatment capacity of 30kg or more (total)	Organic solvent and paint manufacturing business	Reaction facility	Capacity of 3 m <sup>3</sup> or more	Mixing facility	Capacity of 3 m <sup>3</sup> or more	Dilution thinner manufacturing facility	Capacity of 5 m <sup>3</sup> or more or 50 horsepower or more	Facility storing organic solvent, substances containing organic solvent, and oil	Storage capacity of 10 m <sup>3</sup> or more		Paint storage facility	Storage capacity of 50 m <sup>3</sup> or more
Business	Discharge facility																																					
	Facility	Size																																				
Oil refinery and petrochemical manufacturing business	Crude oil refining and manufacturing facility	All facilities																																				
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	Facility storing organic solvent, substances containing organic solvent, and oil	Storage capacity of 10 m <sup>3</sup> or more																																				
	Paint storage facility	Storage capacity of 50 m <sup>3</sup> or more																																				

8) Designated and publicly announced for 37 products and materials including gasoline and benzene (designation and public announcement of volatile organic compounds, Ministry of Environment Public Notice No. 2015-181)

9) Excluding the facilities used in the industry subject to the reduction of fugitive emission stipulated in Article 38-2 of the Enforcement Decree of the Clean Air Conservation Act

10) A device not discharging volatile organic compounds, such as a water washing machine, is not included in the total.

## 03 Installation and operation of facilities discharging volatile organic compounds

Term	Definition		
	Business	Discharge facility	
Volatile organic compound discharge facility	Ships, large steel structure manufacturing (10 m x 10 m or larger)	Facility	Size
		Cleaning facility (including fat-removing facility)	Capacity of 1 m <sup>3</sup> or more
		Painting facility (including drying facility)	Capacity of 5 m <sup>3</sup> or more or 3 horsepower or more
		Facility storing organic solvent and substances containing organic solvent	Storage capacity of 10 m <sup>3</sup> or more
	Automobile manufacturing business	Oil storage facility	Storage capacity of 10 m <sup>3</sup> or more
		Facility storing oil, organic solvent, and substances containing organic solvent	Storage capacity of 10 m <sup>3</sup> or more
	Other manufacturing businesses <sup>11)</sup>	Cleaning facility (including fat-removing facility)	Storage capacity of 1 m <sup>3</sup> or more
		Facility storing oil, organic solvent, and substances containing organic solvent	Storage capacity of 10 m <sup>3</sup> or more
	Waste storage and treatment facility (waste oil, waste organic solvent, and waste pesticide in Attached Table No. 1, Article 3 of the Enforcement Decree of the Waste Control Act)	Storing facility	Storage capacity of 10 m <sup>3</sup> or more (total)
		Breaking, pulverizing, and cutting facility	20 horsepower or more
		Incinerating facility	Daily processing capacity of 10 tons or more
		High-temperature pyrolysis facility	Daily processing capacity of 5 tons or more
		Carbonizing facility	Daily processing capacity of 5 tons or more
		Melting facility	10 horsepower or more
		Evaporating, concentrating, and reacting facility	Daily processing capacity of 5 tons or more
		Refining facility	20 kℓ or more a day <sup>12)</sup>
		Oil-separating facility	Daily processing capacity of 5 tons or more
Coagulation and sedimentation facility		Daily processing capacity of 5 tons or more	
Drying facility	Daily processing capacity of 0.15 m <sup>3</sup> or more		

- 11) Manufacturing business in numbers 16 and 20 (only gunpowder and flame products manufacturing business), 24, 25, 26, 27, and 28 (only home appliances manufacturing business and other electrical equipment manufacturing business), 29, 32, and 31 (only aircraft, spacecraft, and auxiliary equipment manufacturing business and combat vehicle manufacturing business), and 33 in the medium classification of the Korean Standard Industrial Classification
- 12) The standard for calculation is 24 hours a day for high-temperature pyrolysis or distillation under reduced pressure and eight hours a day for other cases.

## 03 Installation of volatile organic compounds discharge facility

### A. Report of installation of volatile organic compounds discharge facility

- A person who is intending to report the installation of a volatile organic compounds discharge facility in an area subject to the reporting of such installation including a special measure area shall submit the required documents to the mayor, the provincial governor, or the mayor of a large city.

▶ **Related regulations** Article 44 (1) of the Clean Air Conservation Act, Article 59 (1) and Article 59-2 (1) of its Enforcement Rules

▶ **Areas subject to the reporting of installation of volatile organic compounds discharge facility**

Area	Applied area
Special measure area	<ul style="list-style-type: none"> <li>• Ulsan, Mipo, and Onsan National Industrial Complex in Ulsan Metropolitan City</li> <li>• Yecheon National Industrial Complex and extended complex in Yeosu, Jeollanam-do</li> </ul>
Air Environment Regulation Area ▶ The air environment regulation area in Article 18 (1) of the Clean Air Conservation Act for which the practice plan <sup>13)</sup> is publicly announced according to Article 19 (2) of the same Act	<ul style="list-style-type: none"> <li>• Busan region                             <ul style="list-style-type: none"> <li>- Busan Metropolitan City (except Gijang-gun)</li> <li>- Gimhae City in Gyeongsangnam-do (except Jinyeong-eup, Jangyu-myeon, Juchon-myeon, Jillye-myeon, Hallim-myeon, Saengnim-myeon, and Sangdong-myeon)</li> </ul> </li> <li>• Daegu region                             <ul style="list-style-type: none"> <li>- Daegu Metropolitan City (except Dalseong-gun)</li> </ul> </li> </ul>

13) Public notice of the practice plan of the air environment plan for the Busan region (Ministry of Environment Public Notice No. 2015-193), public notice of the practice plan of the air environment plan for the Daegu region (Ministry of Environment Public Notice No. 2015-195), and public notice of the practice plan of the air environment plan for the Gwangyangman region (Ministry of Environment Public Notice No. 2015-194)

## 03 Installation and operation of facilities discharging volatile organic compounds

Area	Applied area
<p>Air Environment Regulation Area</p> <p>▶ The air environment regulation area in Article 18 (1) of the Clean Air Conservation Act for which the practice plan<sup>13)</sup> is publicly announced according to Article 19 (2) of the same Act</p>	<ul style="list-style-type: none"> <li>• Gwangyangman region               <ul style="list-style-type: none"> <li>- Gwangyang City (except Bonggang-myeon, Oknyong-myeon, Jinsang-myeon, and Da-ap-myeon), Suncheon City (except Seungju-eup, Juam-myeon, Songgwang-myeon, Nakan-myeon, Byeollyang-myeon, Sangsa-myeon, Hwangjeon-myeon, and Woldeung-myeon) and Yeosu City (except Dolsan-eup, Hwayang-myeon, Nam-myeon, Hwajeong-myeon, and Samsan-myeon) in Jeollanam-do</li> <li>- Hadong Thermal Power Plant site in Hadong-gun, Gyeongsangnam-do</li> </ul> </li> </ul>
<p>Besides the areas above, the areas<sup>14)</sup> designated and publicly announced<sup>15)</sup> by the Minister of Environment through consultation with the head of the related central administrative agency as those required to improve air pollution due to the discharge of volatile organic compounds</p>	<ul style="list-style-type: none"> <li>• Yongin City and Hwaseog City in Gyeonggi-do, Cheongju City in Chungcheongbuk-do, Cheonan City in Chungcheongnam-do, Jeonju City in Jeollabuk-do, Pohang City in Gyeongsangbuk-do, Changwon City in Gyeongsangnam-do, Gwangju Metropolitan City, Daejeon Metropolitan City, and Ulsan Metropolitan City</li> </ul>

### ▶ Required documents

- Report of installation of volatile organic compounds discharge facility (Attached Form No. 27 of the Enforcement Rules of the Clean Air Conservation Act)
- Detailed statement of installation of volatile organic compounds discharge facility and control and prevention facility

### <Note>

- If a volatile organic compounds discharge facility is subject to permission

14) In the areas, only the storage facility and shipping facility of oil reservoir and the storage facility and refueling facility of gas stations are subject to the reporting of installation of volatile organic compounds discharge facility (Article 45 (1) of the Enforcement Decree of the Clean Air Conservation Act)

15) Designation and public announcement of additional regulation of volatile organic compounds (Ministry of Environment Public Notice No. 2016-74)

or report of installation of air pollution discharge facility according to Article 23 (1) of the Clean Air Conservation Act, it is possible to replace the submission of the report of installation of air pollution discharge facility with the submission of application for permission or report of installation of air pollutant discharge facility (Proviso of Article 59-2 (1) of the Enforcement Rules of the Clean Air Conservation Act).

### B. Report of change of installation of volatile organic compounds discharge facility

- It is necessary to make a report for any change of matters reported for the installation of a volatile organic compounds discharge facility.
- A person who is intending to report a change of a volatile organic compounds discharge facility shall submit the required documents to the mayor, the provincial governor, or the head of a large city.

▶ **Related regulations**

- Article 44 (2) of the Clean Air Conservation Act
- Article 60 (1), (2) of the Enforcement Rules of the Clean Air Conservation Act

▶ **Matters subject to report of change**

	Changes to report	When to report
Report of change	Change of the name of the places of business or its representative	Within 30 days of the day of occurrence
	Expansion by 50% or more of the total or aggregate of the volatile organic compounds discharge facility	Before the change
	Change of volatile organic compounds discharge control and prevention facility	Before the change
	Closure of volatile organic compounds discharge facility	Before the change
	Leasing the volatile organic compounds discharge facility or control or prevention facility	Within 30 days of the day of occurrence

## 03 Installation and operation of facilities discharging volatile organic compounds

### ▶ Required documents

- Report of change of volatile organic compounds discharge facility (Attached Form No. 29 of the Enforcement Rules of the Clean Air Conservation Act)
- Original certificate of report of volatile organic compounds discharge facility
- Documents proving the change

### <Note>

- If the submission of the report of installation of volatile organic compounds discharge facility was replaced with the submission of application for permission or report of installation of air pollution discharge facility, the submission of the report of change of volatile organic compounds discharge facility shall be replaced with the submission of application for permission or report of change of air pollution discharge facility. (Proviso of Article 60 (2) of the Enforcement Rules of the Clean Air Conservation Act)

## C. Measures including installation of volatile organic compounds discharge control and prevention facility

- In order to establish a volatile organic compounds discharge facility, it is necessary to take measures for the prevention of damage to the air environment due to the discharge of volatile organic compounds by installing facilities that can control or prevent the discharge of volatile organic compounds.

### ▶ Related regulations

- Article 44 (3) of the Clean Air Conservation Act

### ▶ Standards for installation of volatile organic compounds control and prevention facility, etc.

- Refer to Article 44 (4) of the Clean Air Conservation Act and Article 61 and Attached Table 16 of its Enforcement Rules.
- Refer to the regulations on the kinds of facilities discharging volatile organic compounds, size of facility, installation of facility that controls and prevents discharge, etc. (Ministry of Environment Public Notice No. 2015-125).

#### 04 Operation of volatile organic compounds discharge facility

- In order to control the discharge of volatile organic compounds, it is necessary to inspect and measure the discharge of volatile organic compounds, concentration, etc. at discharging facilities and record and retain the results of inspection and measurement.

##### ▶ Related regulations

- Article 44 (8) of the Clean Air Conservation Act

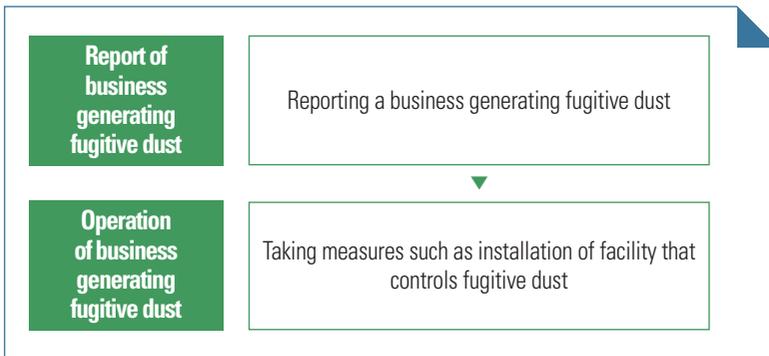
##### ▶ Standards for recording and retaining the results of testing and measurement of volatile organic compounds discharge facility

- Refer to Article 44 (8) of the Clean Air Conservation Act and Article 61 and Attached Table No. 16 of its Enforcement Rules.

# 04 Report and operation of businesses generating fugitive dust

## 01 Summary

- A person who is intending to engage in a business generating fugitive dust shall first report such to the mayor of the special self-governing city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu before commencing business.
- In order to change the matters reported for a business generating fugitive dust, it is necessary to report the change to the mayor of the special self-governing city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu.
- In addition, it is necessary to install a facility that can control fugitive dust or take other necessary measures.



## 02 Report and operation of business generating fugitive dust

### A. Report of business generating fugitive dust

- A person who is intending to report a business generating fugitive dust<sup>16)</sup> shall submit the required documents to the mayor of the special self-governing city,

16) Cement, coal, earth & sand, feed, grain, and scrap metal transportation businesses are exempted from the reporting of a business generating fugitive dust. (Article 58 (1) of the Enforcement Rules of the Clean Air Conservation Act)

the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu.

- ▶ **Related regulations** Article 43 (1) of the Clean Air Conservation Act, Article 44 of its Enforcement Decree, Article 57 and Attached Table No. 13 and Article 58 (1) of its Enforcement Rules

▶ **Businesses generating fugitive dust to be reported**

Business	Category
Cement, lime, plaster, and cement-related product manufacturing and processing business	<ul style="list-style-type: none"> <li>• Cement manufacturing, processing, and storage business</li> <li>• Lime manufacturing business</li> <li>• Concrete product manufacturing business</li> <li>• Plaster manufacturing business</li> </ul>
Nonmetallic material collection, manufacturing, and processing business	<ul style="list-style-type: none"> <li>• Earth, sand, and stone mining business (including aggregate storage and selling business with 100 m<sup>2</sup> or more open storage area)</li> <li>• Coal product manufacturing business and ascon manufacturing business</li> <li>• Refractory ceramics product manufacturing business</li> <li>• Glass and glass product manufacturing business</li> <li>• General ceramics manufacturing business</li> <li>• Structural non-refractory ceramics product manufacturing business</li> <li>• Nonmetallic mineral scrap production business</li> <li>• Construction waste treatment business</li> </ul>
Primary metal manufacturing business	<ul style="list-style-type: none"> <li>• Metal foundry</li> <li>• Iron and steel manufacturing</li> <li>• Nonferrous metal primary smelting and refining business</li> </ul>
Fertilizer and feed product manufacturing business	<ul style="list-style-type: none"> <li>• Chemical fertilizer manufacturing business</li> <li>• Assorted feed manufacturing business</li> <li>• Grain processing business (including toll processing business)</li> </ul>
Construction business	<ul style="list-style-type: none"> <li>• Building construction business (including extension and remodeling of building: 1,000 m<sup>2</sup> or more in total floor area. Total length of 200 m or more or 200 m<sup>3</sup> or more in quantity of excavated earth and sand for tunneling work, however)</li> <li>• Civil engineering works (1,000 m<sup>3</sup> or more in total volume of structure, 1,000 m<sup>3</sup> or more in total area, or 200 m or more in total length)</li> <li>• Landscaping works (5,000 m<sup>2</sup> or more in total area)</li> </ul>



## Report and operation of businesses generating fugitive dust

Business	Category
Construction business	<ul style="list-style-type: none"> <li>• Building demolition work among ground construction work (3,000 m<sup>2</sup> or more in total area), earth work, and grading work (1,000 m<sup>2</sup> or more in total area: excluding farm land arrangement work)</li> <li>• Other works similar to the works above to which the same construction size is applied</li> </ul>
Cement, coal, earth & sand, feed, grain, and scrap metal transportation business	<ul style="list-style-type: none"> <li>• Cement, coal, earth &amp; sand, feed, grain, and scrap metal transportation business</li> </ul>
Transportation equipment manufacturing business	<ul style="list-style-type: none"> <li>• Steel ship manufacturing business and synthetic resin boat production business</li> <li>• Ship components manufacturing business (only cabin block manufacturing business)</li> <li>• Other shipbuilding business</li> </ul>
Businesses that need a facility for stocking coal	<ul style="list-style-type: none"> <li>• Power generation business</li> <li>• Coal storage business at harbor, in station and other areas</li> <li>• Businesses using coal as fuel (100 m<sup>2</sup> or more of coal storage area)</li> </ul>
Scrap metal, grain, feed, timber, and ore loading and unloading and storage business	<ul style="list-style-type: none"> <li>• Maritime cargo handling business</li> </ul>
Metal product manufacturing and processing business	<ul style="list-style-type: none"> <li>• Metal treatment business</li> <li>• Structural metal products manufacturing business</li> </ul>
Waste landfill facility installation and operation business	<ul style="list-style-type: none"> <li>• Waste landfill facility installation and operation business according to the Promotion of Installation of Waste Disposal Facilities and Assistance, etc. to Adjacent Areas Act</li> <li>• Final waste disposal business and comprehensive waste business according to the Waste Control Act</li> </ul>

### ► Required documents

- Report of business generating fugitive dust, etc. (Attached Form No. 24 of the Enforcement Rules of the Clean Air Conservation Act)
- Detailed statement and drawings on the construction outline, location of construction site, facility for protection against dust, etc. and other measures for reduction of fugitive dust (only for construction business)

## B. Report of change of business generating fugitive dust

- It is necessary to make a report of the change of matters reported for a business generating fugitive dust.
- A person who is intending to report a change of the business generating fugitive dust shall submit the required documents to the mayor of the special self-governing city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu.

### ▶ Related regulations

- Proviso of Article 43 (1) of the Clean Air Conservation Act
- Article 58 (1), (2) of the Enforcement Rules of the Clean Air Conservation Act

### ▶ Matters subject to report of change

	Matters subject to reporting	When to report
Report of change	Change of the name of the places of business or its representative	Within 30 days of the day of occurrence
	Change of fugitive dust discharge process	Before the change
	Increase of business volume or addition of kinds	Before the change
	Change of facility controlling the generation of fugitive dust or measures taken	Before the change
	Extension of construction period (applied to construction work only)	Installation period or expiration date of construction period stated in the certificate of report

### ▶ Required documents

- Report of change of business generating fugitive dust (Attached Form No. 24 of the Enforcement Rules of the Clean Air Conservation Act)
- Documents indicating the change

## C. Measures including installation of facility controlling fugitive dust

- It is necessary to report a business generating fugitive dust and install a facility that can control fugitive dust in each discharge process or take other necessary measures.



## Report and operation of businesses generating fugitive dust

### ▶ Related regulations

- Article 43 (1) of the Clean Air Conservation Act

### ▶ Matters subject to report of change

- Article 58 (4) and Attached Table No. 14 of the Enforcement Rules of the Clean Air Conservation Act
- Defining the installation of the facility for the control of fugitive dust and measures to be taken in each discharge process of fugitive dust including open storage, transportation, pulverization, and outside cutting

### ▶ Attention

- Strict standards for the installation of facility for the control of fugitive dust and necessary measures

- ▶ **Related regulations** Article 58 (5) and Attached Table No. 15 of the Enforcement Rules of the Clean Air Conservation Act

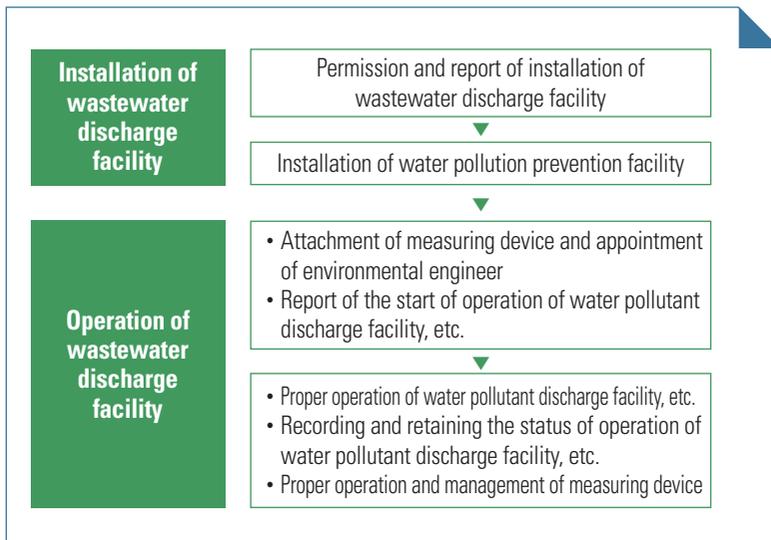
- ▶ **Related contents** The mayor of the special self-governing city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu may apply strict standards in whole or in part to the business operators who are worried about causing considerable harm to the health and property of residents and to the growth and development of animals and plants by engaging in a business generating much fugitive dust

- **Applicable businesses** Cement manufacturing business, concrete product manufacturing business, coal product manufacturing business, building construction business, civil engineering work.

## 05 Installation and operation of facilities discharging wastewater

### 01 Summary

- A person who is intending to install a wastewater discharge facility shall first obtain permission from the mayor or the provincial governor or report such to the mayor or the provincial governor.
- It is necessary to install a wastewater discharge facility after obtaining permission for installation or reporting the installation of the facility, in order to keep the water pollutants discharged from the facility within the acceptable standards stipulated in Article 32 of the Water Environment Conservation Act.
- For the operation of the water pollutant discharge facility and water pollution prevention facility, the start of operation shall first be reported to the mayor or the provincial governor after attaching the measuring device and appointing an environmental engineer.
- The water pollutant discharge facility and the water pollution prevention facility shall be operated properly at all times, and the status of operation of the facilities shall be accurately recorded and retained.



## 05 Installation and operation of facilities discharging wastewater

### 02 Terminology

Term	Definition
Wastewater	The water that cannot be used as it is due to the liquid or solid water pollutants contained in it (Article 2, Subparagraph 4 of the Water Environment Conservation Act)
Water pollutants	What is designated as the cause of water pollution by the order of the Ministry of Environment (Article 2, Subparagraph 7 of the Water Environment Conservation Act, Article 3 and Attached Table 2 of its Enforcement Rules)
Specified hazardous water pollutant	What is designated as a water pollutant by the order of the Ministry of Environment for being possibly harmful to human health and property or growth and development of animals and plants directly or indirectly (Article 2, Subparagraph 8 of the Water Environment Conservation Act, Article 4 and Attached Table 3 of its Enforcement Rules)
Wastewater discharge facility	The facility, machine, device, and other objects defined by the order of the Ministry of Environment to be discharging water pollutants except the ships and marine facilities stipulated in Article 2, Subparagraph 16, 17 of the Marine Environment Management Act (Article 2, Subparagraph 10 of the Water Environment Conservation Act, Article 6 and Attached Table 4 of its Enforcement Rules)
Wastewater non-discharge facility	A facility not discharging wastewater to public waters by treating the wastewater generated in the facility using the water pollution prevention facility of the places of business concerned or recycling the wastewater within the same facility (Article 2, Subparagraph 11 of the Water Environment Conservation Act)
Water pollution prevention facility	<p>The facility defined by the order of the Ministry of Environment to eliminate or reduce the water pollutants emitted from point and non-point pollution sources and other sources of water pollution (Article 2, Subparagraph 12 of the Water Environment Conservation Act, Article 7 and Attached Table 5 of its Enforcement Rules)</p> <p><b>&lt;Note&gt;</b></p> <ul style="list-style-type: none"> <li>• (Point pollution source) Wastewater discharge facility, sewage generation facility, cattle shed, etc. that discharge water pollutants to a certain point through pipe, waterway, etc. (Article 2, Subparagraph 1-2 of the Water Environment Conservation Act)</li> <li>• (Non-point pollution source) Any city, road, mountain land, construction site, etc. that discharges water pollutants non-specifically from an unspecified place. (Article 2, Subparagraph 2 of the Water Environment Conservation Act)</li> <li>• (Other sources of water quality) A facility or a place designated by the order of the Ministry of Environment to be discharging the water pollutants not managed by point and non-point pollution sources (Article 2, Subparagraph 3 of the Water Environment Conservation Act, Article 2 and Attached Table No. 1 of its Enforcement Rules)</li> </ul>

## 03 Installation of wastewater discharge facility

### A. Permission and report of installation of wastewater discharge facility

- A person who is intending to install a water pollutant discharge facility shall report such to the mayor or the provincial governor by submitting related documents.

▶ **Related regulations** Article 33 (1) and Article 34 (1) of the Water Environment Conservation Act, Article 31 (1), (2) of its Enforcement Decree, Article 36 and Article 37 (1) of its Enforcement Rules

▶ **Facilities subject to permission and report**

	Facilities subject to permission and report
Permission	<ol style="list-style-type: none"> <li>1. Wastewater discharge facility discharging the specified hazardous water pollutant beyond the standards stipulated by the order of the Ministry of Environment<sup>17)</sup> (hereinafter referred to as the "standards for permission")</li> <li>2. Wastewater discharge facility installed in a special measure area</li> <li>3. Wastewater discharge facility installed in an area publicly announced by the Minister of Environment<sup>18)</sup> to be prohibited from installing a discharge facility according to Article 33 (8) of the Water Environment Conservation Act</li> <li>4. Wastewater discharge facility installed within 10 km of flow distance upstream from the water source conservation area or the border zone</li> <li>5. In a region where a water source conservation area is not designated, a wastewater discharge facility installed within 15 km of flow distance upstream from the water supply source intake facility</li> <li>6. A wastewater discharge facility whose installation was reported and where the specified hazardous water pollutants are discharged beyond the standards for permission due to change of raw materials, auxiliary materials, production method, etc.</li> <li>7. Wastewater non-discharge facility that can be installed by a wastewater discharge facility discharging the specified hazardous water pollutant defined by the order of the Ministry of Environment<sup>19)</sup> in an area restricted from installing a discharge facility</li> </ol>

17) Article 35-2 and Attached Table No. 13-2 of the Enforcement Rules of the Water Environment Conservation Act

18) Designation of the area and facility for prohibition of waste discharge facilities in the Geumgang River basin (Ministry of Environment Public Notice No. 2018-6)

19) Copper and its compounds, dichloromethane, 1,1-dichloroethylene

## 05 Installation and operation of facilities discharging wastewater

	Facilities subject to permission and report
Report	<ul style="list-style-type: none"> <li>• Wastewater discharge facility except the wastewater discharge facilities (1-6) that are subject to permission</li> <li>• If, among the wastewater discharge facilities (1-6) that are subject to permission, the facilities whose wastewater is treated by entrustment in full and the facilities treating the entrusted water are located outside the area or zone (2-5) subject to permission</li> <li>• If, among the wastewater discharge facilities (2-5) that are subject to permission, the facilities that do not discharge the specified hazardous water pollutants beyond the standards for permission but take all the discharged wastewater into a public wastewater treatment facility or a public sewage treatment facility</li> </ul>

### ► Required documents

- Application for permission or report of installation of wastewater discharge facility (Attached Form No. 12 of the Enforcement Rules of the Water Environment Conservation Act)
- Location map of wastewater discharge facility and wastewater discharge process chart (separate water quality analysis data to be submitted if there is a wastewater discharge facility according to the Proviso of Subparagraph 1, Item c of Attached Table No. 4 of the Enforcement Rules of the Water Environment Conservation Act)
- Statement of use of raw materials (including water), quantity of products produced, and detailed statement of expected water pollutants
- Detailed statement of installation of pollution prevention facility and its drawings (The drawings shall be replaced with an arrangement plan in the case of report of installation.)
- Evidentiary documents if the wastewater discharge facility is exempted from the installation of a water pollution prevention facility
- Documents stating the reasons for exemption from some items of attachment of measuring device and the reasons for selection of the items of measuring device
- The following documents are required additionally if a wastewater non-discharge facility is to be installed:
  - Installation plan and drawings of the separation and water catchment facility that should be installed to prevent wastewater from being discharged into public waters
  - Detailed installation standard implementation plan and drawings of the separation and water catchment facility that should be installed to prevent wastewater from being discharged into public waters

○ If a joint prevention facility has been installed: Documents according to the Subparagraphs of Article 45 (1) of the Enforcement Rules of the Water Environment Conservation Act

### B. Permission and report of change of installation of wastewater discharge facility

- It is necessary to obtain permission for change of important matters in the installation of a water pollutant discharge facility and report the change of other minor matters.
- In addition, it is necessary to report the change of matters reported when installing an air pollutant discharge facility.
- Related documents shall be submitted to the mayor or the provincial governor for permission or report of change of water pollutant discharge facility.

▶ **Related regulations** Article 33 (2), (3) and Article 34 (1) of the Water Environment Conservation Act, Article 31 (3)-(5) of its Enforcement Decree, Article 36 , Article 37 (2) and Article 38 (1)-(3) of its Enforcement Rules

▶ **Matters subject to permission and report of change**

	Changes subject to permission and report	When to apply (report)
Permission	1. Increase in 50% or more of wastewater discharge quantity from the time of permission or increase by 700 m <sup>3</sup> or more a day	Before the change
	2. Increase in 30% or more from the time of permission or increase by 700 m <sup>3</sup> or more a day for a wastewater discharge facility discharging the specified hazardous water pollutant beyond the standards for permission	
	3. Need to improve the wastewater discharge facility or water pollution prevention facility due to the occurrence of new water pollutants exceeding the standards for permission of wastewater discharge	
	4. Need to change the method of treatment of solid wastes at the licensed wastewater non-discharge facility	

## 05 Installation and operation of facilities discharging wastewater

	Changes subject to permission and report	When to apply (report)
Report	Increase in 50% or more of wastewater discharge quantity from the time of permission (except those requiring permission for change)	Before the change
	Change of the type of place of business in Attached Table No. 13 of the Enforcement Decree of the Water Environment Conservation Act due to the increase or decrease of wastewater discharge quantity	
	Discharge of a new water pollutant at the wastewater discharge facility (except those requiring permission for change)	
	Change of wastewater treatment method and treatment process at the water pollution prevention facility	
	New installation of water pollution prevention facility at a wastewater discharge facility exempted from the installation of a water pollution prevention facility	
	Partial closure of wastewater discharge facility or water pollution prevention facility	
	Change of matters that can be replaced <sup>20)</sup> with a report of change of the object of permission of change	
	Change of the name of the places of business or its representative	Within 2 months of the date of occurrence
	Change of location of the places of business <sup>21)</sup>	Within 30 days of the date of occurrence
	Leasing the wastewater discharge facility or water pollution prevention facility	

20) If an agreement was reached in regard to the treatment of wastewater and expense bearing with the representative of the joint prevention facility or the operator of a public wastewater treatment facility, and the wastewater discharge facility is changed within the wastewater treatment capacity, the requirement for permission of change shall be replaced with requirement to report change. (Article 31 (4) of the Enforcement Decree of the Water Environment Conservation Act)

21) Applicable only if the permitting agency, the reporting agency, and the wastewater discharge facility are the same and the regulation restricting the location is not violated.

	Changes subject to permission and report	When to apply (report)
Report	Change of the person entrusted with wastewater treatment	Within 3 days of the date of occurrence
	Complete closure of wastewater discharge facility or water pollution prevention facility	
	Other change of permitted or reported matters stated in the permit or certificate of report <sup>22)</sup>	

**▶ Required documents**

- Application for change of permission or report of water pollutant discharge facility (Attached Form No. 13 of the Enforcement Rules of the Water Environment Conservation Act)
- Original permit for the installation of water pollutant discharge facility or certificate of installation of water pollutant discharge facility
- Documents indicating the change

**<Note> Classification of places of business by size**

- Classifying places of business from Class 1 to Class 5 according to the quantity of wastewater discharged from the wastewater discharge facility (Attached Table No. 13 of the Enforcement Decree of the Water Environment Conservation Act)

Place of business	Discharge quantity
Class 1	2,000 m <sup>3</sup> or more of wastewater a day
Class 2	700 m <sup>3</sup> or more of wastewater a day
Class 3	200 m <sup>3</sup> or more of wastewater a day
Class 4	50 m <sup>3</sup> or more of wastewater a day
Class 5	Less than 50 m <sup>3</sup> of wastewater a day

<sup>22)</sup> Excluding any change of the wastewater discharge quantity and the wastewater discharge process flow chart not changing the type of place of business in Attached Table No. 13 of the Enforcement Decree of the Water Environment Conservation Act

## 05 Installation and operation of facilities discharging wastewater

※ The classification of places of business by size is based on the day of discharge of the biggest amount of wastewater during the year. The wastewater discharge quantity is calculated according to the calculation formula below based on the quantity of water used at the places of business (all kinds of water used at the places of business including tap water, industrial water, underground water, stream water, and seawater). The water used for the production process or the water reused in the production process through a certain pipe prior to release to the final discharge outlet of the water pollution prevention facility shall be excluded, and the water treated at the water pollution prevention facility by taking in diluted water, residential water, indirect cooling water, cleaning water within the places of business, and leachate at the raw material open storage yard shall be included.

- Wastewater discharge quantity = water use quantity - (residential water quantity + indirect cooling water quantity + boiler water quantity + quantity of water contained in products + quantity of water evaporating in the process + quantity of water recognized as not being released to the discharge outlet) + quantity of water generated in the process

### C. Installation of water pollution prevention facility

- A person who is intending to install or change a water pollutant discharge facility after obtaining permission or reporting the installation or change of the facility shall install a water pollution prevention facility in order to keep the water pollutants discharged from the facility within the acceptable standards.

▶ **Related regulations** Article 35(1) of the Water Environment Conservation Act

- Note, however, that places of business meeting the standard for exemption may be exempted from the installation of a water pollution prevention facility. In this case, it is necessary to submit evidentiary documents to the mayor or the provincial governor.

▶ **Related regulations** Proviso of Article 35 (1) of the Water Environment Conservation Act, Article 33 of its Enforcement Decree, Articles 41 and 42 of its Enforcement Rules

▶ **Matters subject to report of change**

- Where the quantity of the water pollutants discharged by the function or process of the water pollutant discharge facility is always less than the allowable standard

○ Where the entire quantity of the following wastewater is entrusted to a registered wastewater treatment company for treatment:

- Less than 50 m<sup>3</sup> (20 m<sup>3</sup> in an area prohibited from installing a wastewater discharge facility) of wastewater discharged daily. If the wastewater is transferred for treatment through a fixed pipe in an apartment-type factory, however, there is no limit to the entrusted treatment regardless of the wastewater quantity
- Discharge of less than 50 m<sup>3</sup> daily (20 m<sup>3</sup> in an area prohibited from installing a wastewater discharge facility) of waste that is difficult to treat properly if it flows in a water pollution prevention facility due to its different characteristic from other wastewater
- Wastewater that can be discharged into waste discharge waters
- The wastewater discharged in relation to the improvement, repair, etc. of a water pollution prevention facility and only during the period agreed upon in advance with the mayor or the provincial governor
- Other wastewater recognized by the Minister of Environment to be an object of entrusted treatment

○ Where, in any of the following cases, it is possible to treat water pollutants properly even without installing a water pollution prevention facility:

- Where it is recognized that a facility reusing wastewater by recycling it in the production process can treat water pollutants properly without discharging it outside the closed process. When the wastewater cannot be reused any more due to the characteristic of the facility or process and is discharged outside the process, however, it is necessary to entrust it to a registered wastewater treatment company or a related professional agency.
- Where a company registered for the sea discharge of wastes discharges wastewater to the designated waters, or if the wastewater is entrusted to a person who is registered for the sea discharge of wastes
- Where the characteristics of the water pollutant conform to the specified waste, and it is entrusted to a specified waste treatment company for treatment
- Where wastewater is used as a product or a raw material of product or used for the treatment of other wastewater or research

## 05 Installation and operation of facilities discharging wastewater

- ▶ **Related regulations** Refer to Article 43 of the Enforcement Rules of the Water Environment Conservation Act for each requirement for exemption from installation of a water pollution prevention facility.
- ▶ **Matters to be observed** Refer to Article 44 and Attached Table No. 14 of the Enforcement Rules of the Water Environment Conservation Act.

- Business operators may jointly install a water pollution prevention facility for the joint treatment of the water pollutants discharged from water pollutant discharge facilities (except a wastewater non-discharge facility). In this case, the business operators or the representative of the joint prevention facility operating body shall first submit related documents to the mayor or the provincial governor.

- ▶ **Related regulations** Article 35 (4) of the Water Environment Conservation Act, Article 45 (1) of its Enforcement Rules
- ▶ **Required documents**
  - Detailed statement of installation, drawings, and location map of joint prevention facility (scale of 1:25,000)
  - Detailed statement of installation of water pollutant discharge facility at each place of business and forecast of quantity of discharged water pollutants
  - Documents showing the quantity of raw materials used and production quantity of products, process chart, and piping diagram for the wastewater discharge of each places of business
  - Installation map and detailed statement of the drainage pipe from the places of business to the joint prevention facility
  - Plan to install measuring devices such as integrating flow meter that can confirm the quantity of water used and wastewater discharge quantity and drawings that can confirm the attached parts (to be submitted only by the places of business required to attach measuring devices)
  - Agreement on the operation of a joint prevention facility including a detailed statement about sharing the discharge fee when it is impossible to measure the wastewater discharge quantity and the concentration of water pollutants of each places of business, surcharge, fine, penalty, etc.

## 04 Operation of wastewater discharge facility

### A. Attachment of measuring device

- It is necessary to attach a measuring device and examine compliance with standards for permission of wastewater at a wastewater discharge facility.

▶ **Types of measuring devices and places of business subject to the attachment of devices**

- Article 38-2 (1) of the Water Environment Conservation Act, Article 35 (1), Attached Table No. 7 and Remarks 1 and 2 of its Enforcement Decree

Place of business	Automatic water quality measuring device <sup>23)</sup>	Auxiliary facilities		Watt-hour meter	Integrating flow meter	
		Automatic specimen collector	Data collector		Water	Sewage and wastewater
Class 1-Class 3	●	●	●	●	●	●
Class 4	—	—	—	●	●	●
Class 5	—	—	—	●	●	—
Class 5 (30 m <sup>3</sup> or more/day of the specified hazardous water pollutant)	—	—	—	●	●	●
Joint prevention facility	200 m <sup>3</sup> or more/day	●	●	●	●	●
	Less than 200 m <sup>3</sup> /day	—	—	—	●	●

▶ **Exemption from and deferral of attachment of measuring device**

- Refer to Items 3 through 6, 9, and 10 in the Remarks of Attached Table No. 7 of the Enforcement Decree of the Water Environment Conservation Act.

23) Five types: Hydrogen ion concentration (pH) automatic water quality measuring device, chemical oxygen demand (COD) automatic water quality measuring device, suspended solids (SS) automatic water quality measuring device, total nitrogen (T-N) automatic water quality measuring device, and total phosphorus (T-P) automatic water quality measuring device

## 05 Installation and operation of facilities discharging wastewater

- ▶ **Measuring device attachment time** (Article 35 (2) 3 of the Enforcement Decree of the Water Environment Conservation Act)
  - Watt-hour meter and integrating flow meter: Before reporting the start of operation
  - Automatic water quality measuring device and auxiliary facility: Within two months of reporting the start of operation
    - If the places of business become required to attach a measuring device due to the increase of wastewater discharge quantity, however, within nine months of the date of change of permission of wastewater discharge facility or the date of reporting of change
- ▶ **Measuring device attachment time** Refer to Attached Table No. 8 of the Enforcement Decree of the Water Environment Conservation Act.

### B. Appointment of environmental engineer

- An environmental engineer shall be appointed for the normal operation and management of water pollutant discharge facility and water pollution prevention facility.

- ▶ **Related regulations** Article 47 (1) of the Water Environment Conservation Act, Attached Table No. 17 and Article 59 (1), (2) of its Enforcement Decree
- ▶ **Time of appointment of environmental engineer**
  - If the water pollutant discharge facility is installed for the first time: At the time of reporting of the start of operation
  - If the environmental engineer is appointed as replacement: Within five days of the day of occurrence<sup>24)</sup>
- ▶ **Qualification standard for environmental engineer for each place of business**

Place of business	Qualification standard
Class 1	One or more water pollution environmental engineers
Class 2	One or more water pollution environmental industrial engineers

24) If, when it is necessary to appoint or replace a person who has the qualification of environmental industrial engineer or higher qualification, it is difficult to find a qualified candidate, it is possible to appoint a person satisfying the standard for qualification for Class 4 and Class 5 places of business within 30 days.

Place of business	Qualification standard
Class 3	One or more water pollution environmental industrial engineer or environmental craftsman, or a person who has worked in the area of water environment for three years or longer
Class 4	A person who received permission for the installation of water pollutant discharge facility or reported the installation of the facility or one or more employees of the places of business concerned working in the water pollutant discharge facility and water pollution prevention facility as appointed by the person who received permission for the installation of water pollutant discharge facility or reported the installation of the facility
Class 5	

- Note**
- 1) Class 1 to Class 3 places of business operating less than 90 days a year may appoint an environmental engineer meeting the qualification for Class 4 and Class 5 places of business.
  - 2) Any Class 1 or Class 2 places of business treating wastewater in a public wastewater treatment facility may appoint an environmental engineer who meets the qualification for Class 3 places of business, and a Class 3 places of business may appoint an environmental engineer who meets the qualification for Class 4 and Class 5 places of business.
  - 3) Any Class 4 or Class 5 places of business discharging water pollutants containing the specified hazardous water pollutant shall have an environmental engineer who meets the qualification for Class 3 places of business. Note, however, that this regulation is not applied to places of business where wastewater containing the specified hazardous water pollutant is discharged at 10 m<sup>3</sup> or less a day.
  - 4) A joint prevention facility discharging wastewater whose quantity is similar to that of Class 4 or Class 5 places of business shall have an environmental engineer who meets the qualification for Class 3 places of business.
  - 5) Places of business exempted from the installation of a water pollution prevention facility and places of business treating wastewater in a joint prevention facility may have an environmental engineer who meets the qualification for Class 4 and Class 5 places of business.
  - 6) An air environmental engineer who has a certificate of qualification as water quality environmental engineer may also work as a water quality environmental engineer.

## 05 Installation and operation of facilities discharging wastewater

### C. Report of start of operation of air pollutant discharge facility, etc.

- If a person is intending to operate a water pollutant discharge facility or a water pollution prevention facility after finishing installation or change<sup>25)</sup>, it is necessary to report the start of operation of the facility to the mayor or the provincial governor by submitting related documents. If the entire wastewater is entrusted for treatment to a company registered for the sea discharge of wastes or a company operating a specified waste treatment facility, however, the report of the start of operation of the facility may be omitted.

#### ▶ Related regulations

- Article 37 (1) of the Water Environment Conservation Act
- Article 34 of the Enforcement Decree of the Water Environment Conservation Act
- Article 46 of the Enforcement Rules of the Water Environment Conservation Act

#### ▶ Cases requiring report of start of operation after report of change of water pollutant discharge facility

- Increase of wastewater discharge quantity by 50 percent or more from the time of initial report
- A wastewater discharge facility or a water pollution prevention facility that needs improvement due to the occurrence of a new water pollutant that exceeds the standard for permission of wastewater discharge
- Change of wastewater treatment method of the water pollution prevention facility installed at a wastewater discharge facility
- New installation of water pollution prevention facility at a wastewater discharge facility that is exempted from the installation of water pollution prevention facility

#### ▶ Required documents

- Wastewater discharge facility and water pollution prevention facility operation start report (Attached Form No. 16 of the Water Environment Conservation Act)
- Original permit for the installation of wastewater discharge facility or certificate of installation of wastewater discharge facility

- It is necessary to operate a water pollution prevention facility<sup>26)</sup> to prevent the water pollutants from being discharged from the wastewater discharge facility during the test operation period after the reporting of the start of operation under the standard for permission of wastewater discharge.

25) Applicable to a change beyond a certain size if made after reporting

26) Except a wastewater non-discharge facility

▶ **Related regulations** Article 37 (2) of the Water Environment Conservation Act, Article 47 (1) of its Enforcement Rules

▶ **Test operation period** Depending on the wastewater treatment method

Wastewater treatment method	Test operation period
Biochemical treatment	Within 50 days of the date of the start of operation (70 days if the date of the start of operation is between November 1 and January 31 of the following year)
Physical or chemical treatment	Within 30 days of the date of the start of operation

**D. Adequate operation of water pollutant discharge facility, etc.**

• A water pollutant discharge facility (except a wastewater non-discharge facility) and a water pollution prevention facility shall not be operated inadequately.

▶ **Related regulations** Article 38 (1) of the Water Environment Conservation Act

▶ **Conducts that are prohibited when operating a water pollutant discharge facility and a water pollution prevention facility**

- Discharging water pollutants from discharging facilities without flowing them into prevention facilities, or installing facilities that can discharge water pollutants without flowing them into prevention facilities
- Discharging water pollutants that flow into prevention facilities without passing through the final discharge outlet, or installing facilities that can discharge water pollutants without passing through the final discharge outlet
- Treating water pollutants from discharge facilities by mixing water not discharged during the process or unpolluted water discharged during the process, or discharging water pollutants exceeding the permissible discharge limits by mixing with water to lower the pollution level before such water pollutants pass through the final discharge outlet (excluding where recognized as treated as diluted by the Minister of Environment or the Mayor or Do governor)
- Discharging water pollutants exceeding the permissible discharge limits due to failure to normally operate discharging facilities and prevention facilities without good cause

## 05 Installation and operation of facilities discharging wastewater

- In addition, a wastewater non-discharge facility shall not be operated inadequately, either.

- ▶ **Related regulations** Article 38 (2) of the Water Environment Conservation Act
- ▶ **Conducts that are prohibited when operating a wastewater non-discharge facility**
  - Removing wastewater discharged from wastewater non-discharge facilities from the place of business, discharging in to public waters, or installing facilities that can discharge such wastewater into public waters
  - Treating wastewater discharged from wastewater non-discharge facilities by mixing it with sewage or wastewater discharged from other discharging facilities, or installing facilities that can treat the wastewater in such manner
  - Where wastewater discharged from wastewater non-discharge facilities is reused, reusing wastewater in other discharging facilities without reusing it in the same wastewater non-discharge facilities or using such wastewater for flushing toilets, landscaping, fire fighting, etc.

- In addition, it is necessary to record accurately the status of operation of a water pollutant discharge facility and a water pollution prevention facility and keep the record for one year<sup>27)</sup> from the final recording date.

- ▶ **Related regulations** Article 38 (3) of the Water Environment Conservation Act, Article 49 (1) of its Enforcement Rules

### E. Adequate operation and management of measuring device

- The attached measuring device shall not be operated inadequately. The standards for the operation and management of the measuring device shall be strictly observed for continuous maintenance of the reliability and accuracy of the data measured by the measuring device.

- ▶ **Conducts that are prohibited when operating a measuring device** (Article 38-3 (1) of the Water Environment Conservation Act)
  - Intentionally defaulting on the operation of the measuring instruments, or on normal measurement
  - Leaving the measuring instruments which do not work normally due to corrosion,

27) Three years at a wastewater non-discharge facility

- wear and tear, breakdown, or damage, unattended without good cause
- Omitting or falsely keeping a measurement reading

▶ **Standards for operation and management of measuring device**

Article 38-3 (2) of the Water Environment Conservation Act, Article 50 of its Enforcement Rules

# 06 Installation and operation of non-point pollution source

## 01 Summary

- A person who is intending to engage in a development business beyond a certain size or install a wastewater discharge facility at a workplace that is very much likely to cause non-point pollution shall report such to the head of the basin environmental office or the head of the regional environmental office.
- In order to change the particulars of the report of installation of non-point pollution source, it is necessary to report the change to the head of the basin environmental office or the head of the regional environmental office.
- When reporting the installation of non-point pollution source, it is necessary to install a non-point pollution reduction facility for the elimination or reduction of water pollutants discharged from the non-point pollution source.
- When installing and operating a non-point pollution source, it is necessary to observe the standards for the management and operation of non-point pollution reduction facility.

### Installation of non-point pollution source

Report of installation of non-point pollution source



Installation of non-point pollution reduction facility



### Operation of non-point pollution source

Compliance with standards for the management and operation of non-point pollution reduction facility

## 02 Terminology

Term	Definition
Non-point pollution source	A source of unspecified discharge of water pollutants at an unspecified place such as city, road, farmland, mountain area, or construction site (Article 2, Subparagraph 2 of the Water Environment Conservation Act)
Non-point pollution reduction facility	Among the water pollution prevention facilities, a facility designated by the order of the Ministry of Environment to eliminate or reduce the water pollutants discharged from a non-point pollution source (Article 2, Subparagraph 13 of the Water Environment Conservation Act and Article 8 and Attached Table No. 6 of its Enforcement Rules)
Water pollution prevention facility	A facility designated by the ordinance of the Ministry of Environment to eliminate or reduce the water pollutants discharged from a point pollution source, a non-point pollution source, or other sources of water pollutants (Article 2, Subparagraph 12 of the Water Environment Conservation Act and Article 7 and Attached Table No. 5 of its Enforcement Rules)
Water pollutants	Those designated by the ordinance of the Ministry of Environment as the cause of water pollution (Article 2, Subparagraph 7 of the Water Environment Conservation Act and Article 3 and Attached Table No. 2 of its Enforcement Rules)

## 03 Installation and operation of non-point pollution source

### A. Report of installation of non-point pollution source

- A person who is intending to install a non-point pollution source shall submit the required documents to the head of the basin environmental office or the head of the regional environmental office.

▶ **Related regulations** Article 53 (1), (2) of the Water Environment Conservation Act, Article 72 (1)-(4) of its Enforcement Decree, and Article 73 (1), (2) of its Enforcement Rules

## 06 Installation and operation of non-point pollution source

### ▶ Projects and facilities required to report a non-point pollution source

	Non-point pollution source to be reported	When to report
Project	<ul style="list-style-type: none"> <li>Urban development project according to Subparagraph 1 of Attached Table No. 3 of the Enforcement Decree of the Environmental Impact Assessment Act<sup>28)</sup></li> <li>Industrial complex construction project according to Subparagraph 2, Attached Table No. 3 of the Enforcement Decree of the Environmental Impact Assessment Act</li> <li>A project stipulated in Subparagraphs 3 through 17 of Attached Table No. 3 of the Enforcement Decree of the Environmental Impact Assessment Act</li> </ul>	Within 60 days of the date of obtaining approval according to Article 30 (3) of the Environmental Impact Assessment Act or the date of confirmation of the project plan
	<ul style="list-style-type: none"> <li>Any of the projects above that becomes an item of rewriting or rediscussion of environmental impact assessment according to Article 32 of the Environmental Impact Assessment Act</li> </ul>	
Place of business	<ul style="list-style-type: none"> <li>A place of business with site area of 10,000 m<sup>2</sup> or more and which installs a steel manufacturing facility, a textile dyeing facility, or a wastewater discharge facility for 14 industry types<sup>29)</sup></li> <li>An increase of 30% or more of the site area at a place of business receiving permission for change of wastewater discharge facility or reporting the change</li> </ul>	Within 30 days of obtaining approval of the installation or change of wastewater discharge facility or date of report of installation or change

28) Except the projects performed only at the sea in Article 2, Subparagraph 1, Item a of the Public Waters Management and Reclamation Act among the projects stated in Attached Table No. 3, Subparagraph 4 or 10 of the Enforcement Decree of the Environmental Impact Assessment Act

29) ①Timber and wood products manufacturing business, ②Pulp, paper, and paper products manufacturing business, ③Coke, petroleum refined products, and nuclear fuel manufacturing business, ④Compounds and chemical products manufacturing business, ⑤Rubber and plastic products manufacturing business, ⑥Nonmetallic mineral products manufacturing business, ⑦Primary metal industry, ⑧Coal, crude oil, and uranium mining industry, ⑨Metal mining industry, ⑩Nonmetallic minerals mining industry (excluding fuel), ⑪Foods and beverage manufacturing business, ⑫Electricity, gas, and steam business, ⑬Wholesale and commodity brokerage business, ⑭Sewage treatment business, waste treatment business, and cleaning-related services

### ► Required documents

- Report of installation of non-point pollution source (Attached Form No. 33 of the Enforcement Rules of the Water Environment Conservation Act)
- Data on major non-point pollution sources and non-point pollutants occurring in development projects, etc.
- Ground plan and flow chart of occurrence and discharge of non-point pollutants in development projects, etc.
- Non-point pollution reduction plan for maintenance of development projects, reduction of discharge of rainfall, etc.
- Installation and operation plan and drawings for non-point pollution reduction facility, detailed statement of installation of non-point pollution reduction facility (except when an application is made for exemption from installation of non-point pollution reduction facility)

### ► Attention

#### ► Definition of environmental impact assessment

The term "environmental impact assessment" refers to an assessment conducted to formulate measures for preventing, alleviating, or mitigating harmful environmental impacts by surveying, forecasting, and assessing the environmental impact of a project when intending to permit, authorize, approve, or license an implementation plan or an execution plan that has an environmental impact or to make a determination on such implementation plan or execution plan (Article 2, Subparagraph 2 of the Environmental Impact Assessment Act).

#### ► Types and scope of projects subject to environmental impact assessment

Refer to Article 22 (1), (2) of the Environmental Impact Assessment Act and Article 31 (1), (2) and Attached Table No. 3 of its Enforcement Decree.

## B. Report of change of installation of non-point pollution source

- To change the report of installation of non-point pollution source, a report of change should be filed.
- To report a change in the report of installation of non-point pollution source, prepare and submit the required documents to the head of the basin environmental office or the head of the regional environmental office.



## Installation and operation of non-point pollution source

### ▶ Related regulations

- Article 53 (1) and (2) of the Water Environment Conservation Act
- Article 73 of the Enforcement Decree of the Water Environment Conservation Act
- Article 73 (4) of the Enforcement Rules of the Water Environment Conservation Act

### ▶ Changes to be reported

	Changes to be reported	When to report
Report of change	<ul style="list-style-type: none"> <li>• Change of company name, representative, or business type</li> </ul>	Within 30 days of the date of change
	<ul style="list-style-type: none"> <li>• Increase of 15% or more of the total project area, development area, or site area of the workplace compared to the initial report</li> <li>• Change of the kind, location, and size of non-point pollution reduction facility, except when the capacity of the facility is changed by less than 15% of the initially reported capacity</li> <li>• Partial or complete closure of non-point pollution source or non-point pollution reduction facility except in the case of development project or partial or complete closure according to the completion of construction of the non-point pollution reduction facility for the treatment of non-point pollutants generated during the construction work</li> </ul>	Within 15 days of the date of change or date of approval for the change <sup>30)</sup>

### ▶ Required documents

- Report of change of installation of non-point pollution source (Attached Form No. 35 of the Enforcement Rules of the Water Environment Conservation Act)
- Documents proving the change

## C. Installation of non-point pollution reduction facility

- When reporting the installation or change of a non-point pollution source, it is necessary to install a non-point pollution reduction facility according to

30) If the changes related to a project or a facility required to report non-point pollution source are to be permitted, authorized, approved, licensed, or decided according to the related statute

the standards for installation of non-point pollution reduction facility for the elimination or reduction of water pollutants discharged from the non-point pollution source.

▶ **Related regulations**

- Article 53 (3) of the Water Environment Conservation Act and Article 75 (1) of its Enforcement Rules

▶ **When to install non-point pollution reduction facility**

- Development project
  - Non-point pollution reduction facility for the treatment of non-point pollutants generated during construction work: before the start of the construction work
  - Non-point pollution reduction facility for the treatment of non-point pollutants generated after completion of construction work: upon completion of the construction work. If a non-point pollution reduction facility has to be installed at a project site where another construction work is completed, however, the period shall be within one year of acceptance of the report of installation or change of non-point pollution source.
- Place of business: Before reporting the start of the wastewater discharge facility, etc. If a non-point pollution reduction facility has to be installed at a site where the factory is established, however, the period shall be within one year of acceptance of the report of installation or change of non-point pollution source.

▶ **When to install non-point pollution reduction facility**

- Refer to Article 53 (3) of the Water Environment Conservation Act and Article 76 and Attached Table No. 17 of its Enforcement Rules.

- If the place of business is exempted from the installation of non-point pollution reduction facility, however, a non-point pollution reduction facility may not be installed.

▶ **Related regulations**

- Proviso of Article 53 (3) of the Water Environment Conservation Act

▶ **Requirement for exemption from installation of non-point pollution reduction facility**

- Where it is recognized by the Minister of Environment that the discharge of rainfall is always below the standard for permission of wastewater discharge



## Installation and operation of non-point pollution source

- Where the discharged rainfall is treated at a buffer water storage facility according to Article 21-4 of the Water Environment Conservation Act
- Where there are two or more business operators exempted from installation of the aforesaid non-point pollution reduction facility on one site, and it is recognized by the Minister of Environment that the non-point pollution source can be managed adequately

### D. Compliance with standards for the management and operation of non-point pollution reduction facility

- When a business operator reporting the installation of non-point pollution reduction facility engages in the relevant business or installs and operates the facility, it is necessary to observe the standards for the management and operation of non-point pollution reduction facility.

#### ▶ Related regulations

- Article 53 (4) of the Water Environment Conservation Act, Article 76 (2) and Attached Table No. 18 and Article 76 (3) of its Enforcement Rules

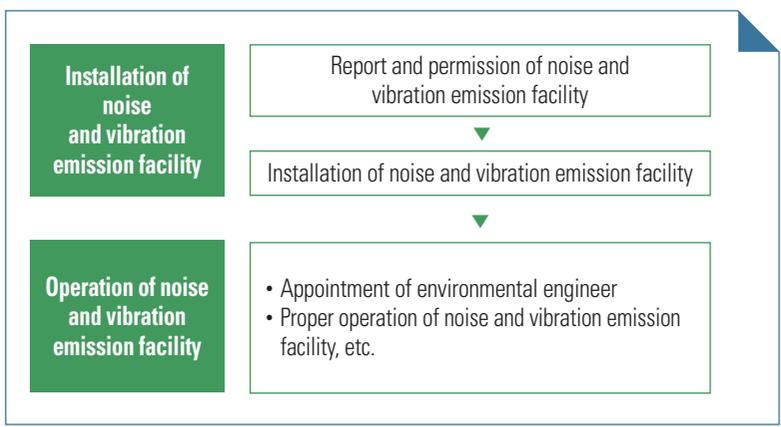
#### ▶ Matters to be observed

- Compliance with the non-point pollution reduction plan
- Compliance with standards for the management and operation of non-point pollution reduction facility by maintaining and managing it according to the standards for installation of non-point pollution reduction facility
- Inspection of the facility before and after raining by designating a manager of the non-point pollution reduction facility
- Recording of results of inspection of the facility in the management and operation book (Attached Form No. 36 of the Enforcement Rules of the Water Environment Conservation Act) and keeping of the record for two years

# 07 Installation and operation of facilities generating noise and vibration

## 01 Summary

- A person who is intending to install a noise and vibration emission facility at the factory shall report such to the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu and shall obtain permission for the installation of the same facility at a factory located near a school or a general hospital.
- In order to change the matters reported or permitted for the installation of the facility emitting noise and vibration, it is necessary to report the change to the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu.
- When installing or changing the facility emitting noise and vibration after reporting or obtaining permission for its installation or change, it is necessary to install a noise and vibration prevention facility in order to keep the noise and vibration emission from the factory below the standard for permission of their emission according to Article 7 of the Noise and Vibration Control Act.
- An environmental engineer shall be appointed for the proper operation and management of noise and vibration emission facility and noise and vibration prevention facility.
- In addition, when the noise and vibration emission facility or noise and vibration prevention facility begins operation following installation or change, the level of noise and vibration emission from the factory shall be kept below the standards for permission of their emission within 30 days of the date of the start of operation.



## 07 Installation and operation of facilities generating noise and vibration

### 02 Terminology

Term	Definition
Noise	Strong sounds produced by the use of machinery, tools, facilities, and other material objects or by the activities of people in multi-unit housing or other places determined by the Ordinance of the Ministry of Environment (Article 2, Subparagraph 1 of the Noise and Vibration Control Act and Article 2 of its Enforcement Rules)
Vibration	Any strong swaying movement generated by the use of machinery, tools, facilities, and other material objects (Article 2, Subparagraph 2 of the Noise and Vibration Control Act)
Noise and vibration emission facilities	Machinery, tools, facilities, and other material objects of factories that produce noise and vibration as determined by the Ordinance of the Ministry of Environment (Article 2, Subparagraph 3 of the Noise and Vibration Control Act and Article 2, Subparagraph 2 and Attached Table 1 of its Enforcement Rules)
Noise and vibration prevention facilities	Facilities eliminating or reducing noise and vibration emitted from noise and vibration emission facilities as determined by the Ordinance of the Ministry of Environment (Article 2, Subparagraph 4 of the Noise and Vibration Control Act and Article 3 and Attached Table 2 of its Enforcement Rules)
Factory	A factory defined in Item 1, Article 2 of the Industrial Cluster Development and Factory Establishment Act; note, however, that this shall exclude airplane service factories in airport facilities determined pursuant to Article 12 (1) of the Urban Planning Act (Article 2, Subparagraph 7 of the Noise and Vibration Control Act)

### 03 Installation and operation of noise and vibration emission facility

#### A. Report and permission of noise and vibration emission facility

- A person who is intending to install a noise and vibration emission facility at the factory shall report such to the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county

governor, or the head of a Gu. For the installation of a noise and vibration emission facility at a factory located near a school, a general hospital, etc., it is necessary to obtain permission from the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu.

▶ **Related regulations** Article 8 (1) of the Noise and Vibration Control Act, Article 2 (1), (2) of its Enforcement Decree, and Article 9 of its Enforcement Rules

▶ **Areas required to obtain permission for installation of noise and vibration emission facility**

- Within 50 m of the straight line distance from the boundary of the site of a general hospital
- Within 50 m of the straight line distance from the boundary of the site of a public library
- Within 50 m of the straight line distance from the boundary of the site of a school including elementary school, middle school, high school, and college
- Within 50 m of the straight line distance from the boundary of the site of an apartment complex
- A residential area or an area of Class 2 District Unit Plan (applicable only to a residential type)
- Within 50 m of the straight line distance from the boundary of the site of a long-stay hospital for the elderly with 100 or more beds
- Within 50 m of the straight line distance from the boundary of the site of a daycare center that can accommodate 100 or more children

▶ **Required documents**

	Report	Permission
Documents	<ul style="list-style-type: none"> <li>• Report of installation of noise and vibration emission facility (Attached Form No. 1 of the Enforcement Rules of the Noise and Vibration Control Act)</li> <li>• Detailed statement of installation of noise and vibration prevention facility</li> <li>• Related documents for exemption from installation of noise and vibration prevention facility</li> </ul>	<ul style="list-style-type: none"> <li>• Application for permission of installation of noise and vibration emission facility (Attached Form No. 1 of the Enforcement Rules of the Noise and Vibration Control Act)</li> <li>• Detailed statement and planned layout of noise and vibration emission facility</li> <li>• Detailed statement of installation and drawings of noise and vibration prevention facility</li> <li>• Related documents for exemption from installation of noise and vibration prevention facility</li> </ul>

## 07 Installation and operation of facilities generating noise and vibration

### ▶ Attention Areas exempted from the report and permission of installation of noise and vibration emission facility

- ▶ **Related regulations** Article 8 (3) of the Noise and Vibration Control Act and Article 2 (4) of its Enforcement Decree
- ▶ **Related information** The noise and vibration emission facility to be installed at a factory located in an industrial complex or a general industrial region shall be exempted from report or permission. In this case, the business operator shall be governed by Articles 14 through 16 and 17 (except the case of cancellation of license) and Article 47 (1) 1 of the Noise and Vibration Control Act.
- ▶ **Exempted areas**
  - An industrial complex according to Article 2, Subparagraph 8 of the Industrial Sites and Development Act
  - An exclusive industrial region and a general industrial region designated according to Article 30 of the Enforcement Decree of the National Land Planning and Utilization Act
  - A free trade zone designated according to Article 4 of the Act on the Designation and Management of Free Trade Zones
  - An area designated as an area similar to the areas above by the mayor or the provincial governor with the approval of the Minister of Environment

### B. Report of change of installation of noise and vibration emission facility

- It is necessary to report a change of the matters reported or permitted for installation of noise and vibration emission facility.
- A person who is going to report a change of noise and vibration emission facility shall submit the required documents to the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu.

#### ▶ Related regulations

- Article 8 (2) of the Noise and Vibration Control Act
- Article 10 (1) and Attached Table No. 6, Article 10 (2) of the Enforcement Rules of the Noise and Vibration Control Act

► **Matters subject to report of change**

- Article 8 (2) of the Noise and Vibration Control Act
- Article 10 (1) and Attached Table No. 6, Article 10 (2) of the Enforcement Rules of the Noise and Vibration Control Act

	Changes to be reported	When to report
Report of change	Expansion of 50% or more of the size of the noise and vibration emission facility (cumulative sum of the size reported or permitted for change)	Before the change
	Change of the name of the place of business or its representative	Within 60 days of the date of change
	Complete closure of the noise and vibration emission facility	Before the change

► **Required documents**

- Report of change of noise and vibration emission facility (Attached Form No. 5 of the Enforcement Rules of the Noise and Vibration Control Act)
- Original certificate of report or permit of installation of noise and vibration emission facility
- Documents proving the change

### C. Installation of noise and vibration prevention facility

- In order to install or change a noise and vibration emission facility after report or permission of installation or change, it is necessary to install a noise and vibration prevention facility in order to keep the emitted noise and vibration below the permitted level.

► **Related regulations** Article 9 of the Noise and Vibration Control Act

- A place of business exempted from the installation of noise and vibration prevention facility may not install a noise and vibration prevention facility.<sup>31)</sup>

31) If a house, a shopping district, a school, or a hospital, etc. according to Article 11 (1) of the Enforcement Rules of the Noise and Vibration Control Act is newly installed within 200 m of the straight line distance from the boundary of the site of the factory, or a dispute arises due to the noise and vibration produced at the factory, it is necessary to keep the level of emission of the noise and vibration below the permitted standard by installing a noise and vibration prevention facility. (Article 11 (2) of the Enforcement Rules of the Noise and Vibration Control Act)

## 07 Installation and operation of facilities generating noise and vibration

### ▶ Requirement for exemption from installation of noise and vibration prevention facility

- Proviso of Article 9 of the Noise and Vibration Control Act and Article 11 (1) of its Enforcement Rules
- A case recognized by the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu to be emitting noise and vibration at all times under the standard for permission of emission of noise and vibration due to the function and process of the noise and vibration emission facility and the conditions of the factory site
- If there is none of the facilities stated below within 200 m of the straight line distance from the boundary of the site of the factory concerned
  - House, shopping district, school, hospital, or religious facility
  - Factory or place of business
  - Tourist attraction and tourist complex
  - Other areas publicly announced by the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu

- It is possible to install a joint prevention facility in a knowledge industrial center or an area concentrated with factories in order to prevent the noise and vibration emitted from factories together.

- ▶ **Related regulations** Article 12(1) of the Noise and Vibration Control Act

### D. Operation of noise and vibration prevention facility

- An environmental engineer shall be appointed for the normal operation and management of noise and vibration emission facility and noise and vibration prevention facility.

Note, however, that this shall not be the case if a person handling the work of an environmental engineer was appointed.

### ▶ Related regulations

- Article 19 (1), (5) of the Noise and Vibration Control Act
- Article 18 (1) and Attached Table No. 7 of the Enforcement Rules of the Noise and Vibration Control Act

► **Qualification standard**

Classification	Qualification standard
A place of business using total power of less than 3,750 kW	A person among the employees working at the noise and vibration emission facility and noise and vibration prevention facility of the workplace as appointed by the business operator
A place of business using total power of 3,750 kW or more	One or more persons possessing the certificate of Grade 2 noise and vibration engineer or who are appointed by the business operator as the responsible manager of the place of business concerned

- 1) Total power is the aggregate of the power used for machinery and tools among the noise emission facilities excluding the power used for other facilities.
- 2) A Grade 2 noise and vibration engineer may be replaced by a person who has a Grade 2 or higher certificate in machinery or electricity and at least two years' working experience in the environmental area.
- 3) A place of business exempted from installing a noise and vibration prevention facility may appoint an environmental engineer who meets the qualification for a place of business using total power of less than 3,750 kW regardless of the location of the place of business and the amount of power used.
- 4) A person who is appointed as environmental engineer shall be a full-time employee of the place of business concerned.

• When operating the noise and vibration emission facility after finishing installation or change of the noise and vibration emission facility or noise and vibration prevention facility, it is necessary to keep the noise and vibration emitted from the factory below the standards for permission of their emission within 30 days of the date of the start of operation.

► **Related regulations** Article 14 of the Noise and Vibration Control Act and Article 14 (1) of its Enforcement Rules

## 08 Installation and operation of facilities generating malodor

### 01 Summary

- A person who is intending to install a malodor-emitting facility in a malodor management area or operate a malodor-emitting facility designated and publicly announced to be reported in an area besides malodor management areas shall report such to the mayor of the special autonomous city, the governor of the special self-governing province, the head of a large city, the mayor, the county governor, or the head of a Gu.
- In order to change the matters reported for the installation of a malodor-emitting facility, it is necessary to report the change to the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu.
- If the plan to prevent malodor is submitted according to the report of installation or change of malodor-emitting facility, it is necessary to take the necessary measures for the prevention of malodor prior to the operation of the malodor-emitting facility according to the plan.

#### Installation of malodor-emitting facility

Report of installation of malodor-emitting facility



Taking measures to prevent malodor according to the malodor prevention plan



#### Operation of malodor-emitting facility

Observing the standards for permission of malodor emission

## 02 Terminology

Term	Definition
Malodor	Any odor that causes displeasure and disgust to people by stimulating their olfactory sense with hydrogen sulfide, mercaptan, amine, or other pungent substances (Article 2, Subparagraph 1 of the Malodor Prevention Act)
Designated malodor-producing substance	Any malodor-causing substance as prescribed by the Ordinance of the Ministry of Environment (Article 2, Subparagraph 2 of the Malodor Prevention Act and Article 2 and Attached Table No. 1 of its Enforcement Rules)
Malodor-emitting facilities	Any facilities, machinery, tool, or others emitting malodor as prescribed by the Ordinance of the Ministry of Environment after consultation between the Minister of Environment and the heads of the relevant central administrative agencies (Article 2, Subparagraph 3 of the Malodor Prevention Act and Article 3 and Attached Table No. 2 of its Enforcement Rules)
Malodor management area	<ul style="list-style-type: none"> <li>• Article 6 (1) of the Malodor Prevention Act and Article 5-2 of its Enforcement Rules</li> <li>• Any of the following areas designated by the mayor, the provincial governor, or the head of a large city:               <ul style="list-style-type: none"> <li>○ An area where civil complaints related to malodor persist for at least a year and malodor exceeds the standards for permission of emission in a region where two or more malodor-emitting places of business are located adjacently</li> <li>○ Any of the following areas where civil complaints related to malodor occur collectively:                   <ul style="list-style-type: none"> <li>- National industrial complex, urban hi-tech industrial complex, and agricultural industrial complex</li> <li>- Exclusive industrial region</li> <li>- General industrial region (limited to free trade zone)</li> </ul> </li> </ul> </li> </ul>
Facility subject to reporting in an area other than a malodor management area	<ul style="list-style-type: none"> <li>• Article 8-2 (1), (4) of the Malodor Prevention Act</li> <li>• The mayor, the provincial governor, or the head of a large city may designate and publicly announce a malodor-emitting facility installed in an area besides the malodor management areas as an object of report if civil complaints persist for over a year in relation to the malodor-emitting facility and if the compound malodor or designated malodor-producing substance exceeds the standards for permission of emission according to Article 7 of the Malodor Prevention Act (hereinafter referred to as "standards for permission of emission of malodor") for three times or more.</li> <li>• The mayor, the county governor, or the head of a Gu may request the mayor or the provincial governor to designate and publicly announce the facility subject to reporting if necessary for the conservation of the living environment of the residents.</li> </ul>



## Installation and operation of facilities generating malodor

### 03 Installation and operation of malodor-emitting facility

#### A. Report of installation of malodor-emitting facility

- A person who is intending to install a malodor-emitting facility in a malodor management area shall report it to the mayor of the special autonomous city, the governor of the special self-governing province, the head of a large city, the mayor, the county governor, or the head of a Gu.
- In order to operate a facility subject to reporting as designated and publicly announced in an area besides malodor management areas, it is necessary to report such to the mayor of the special autonomous city, the governor of the special self-governing province, the head of a large city, the mayor, the county governor, or the head of a Gu within six months of the date of designation and public notice.
- A person who is intending to report the installation of malodor-emitting facility shall submit the required documents, including the plan to prevent malodor, to the mayor of the special autonomous city, the governor of the special self-governing province, the head of a large city, the mayor, the county governor, or the head of a Gu.
- If materials proving that odor is emitted below the standards for permission of emission at all times are submitted, however, submission of the plan to prevent malodor may be omitted.

▶ **Related regulations** Article 8 (1), (2), and Article 8-2 (2) of the Malodor Prevention Act, Article 9 (1) and Article 11 (2) of its Enforcement Rules

▶ **Required documents**

- Report of installation and operation of malodor-emitting facility (Attached Form No. 2 of the Enforcement Rules of the Malodor Prevention Act)
- Planned layout of the place of business
- Detailed statement of installation and process chart of malodor-emitting facility
- Types, concentration, and forecast of the quantity of malodor substances produced
- Malodor prevention plan
- Yearly maintenance and management plan of malodor prevention facility

- Required documents for exemption from submission of malodor prevention plan
  - Explanatory materials on the characteristics of the function, process, and materials used (including auxiliary materials) of the malodor-emitting facility
  - Inspection analysis materials of the malodor inspection agency proving that the malodor-emitting facility always emits malodor below the standards for permission of emission
  - Objective literature or data that can complement the inspection analysis materials

#### <Note>

- If a malodor-emitting facility whose installation of air pollutant discharge facility was reported or permitted according to Article 23 (1) of the Clean Air Conservation Act or whose installation of volatile organic compounds discharge facility was reported according to Article 44 of the same law, the submission of the report of installation of malodor-emitting facility may be replaced with the submission of such permit or report (Article 9 (2) of the Enforcement Rules of the Malodor Prevention Act).

## B. Report of change of malodor-emitting facility

- It is necessary to make a report for change of the matters reported for the installation of malodor-emitting facility.
- A person who is going to report a change of malodor-emitting facility shall submit the required documents to the mayor of the special autonomous city, the governor of the special self-governing province, the head of a large city, the mayor, the county governor, or the head of a Gu.

#### ▶ Related regulations

- Article 8 (1), (2) and Article 8-2 (2) of the Malodor Prevention Act
- Article 10 (1), (2) of the Enforcement Rules of the Malodor Prevention Act



## Installation and operation of facilities generating malodor

### ► Changes to be reported

	Changes to be reported	When to report
Report of change	Change of the plan to prevent malodor at the malodor-emitting facility or change of the malodor prevention facility (including change of the raw materials used)	Before the change
	Closure of malodor-emitting facility or addition or closure of the process decided in the standards for the size of malodor-emitting facility according to Subparagraph 2 in Attached Table No. 2 of the Enforcement Rules of the Malodor Prevention Act	
	Change of name of the place of business or its representative	
	Lease of malodor-emitting facility or malodor prevention facility	

### ► Required documents

- Report of change of malodor-emitting facility (Attached Form No. 4 of the Enforcement Rules of the Malodor Prevention Act)
- Detailed statement of change of malodor-emitting facility or malodor prevention facility (except the closure of malodor-emitting facility and change of name of the place of business or its representative)
- Kinds and concentration of malodor substances and detailed statement of forecast of quantity produced (except the closure of malodor-emitting facility and change of name of the place of business or its representative)
- Malodor prevention plan (except the closure of malodor-emitting facility and change of name of the place of business or its representative)
- Original certificate of installation and operation of malodor-emitting facility

## C. Measures necessary for malodor prevention

- It is necessary to take measures for the prevention of malodor according to the plan to prevent malodor prior to the operation of the malodor-emitting facility in a malodor management area and within one year of the date of designation<sup>32)</sup> and public announcement of the facility subject to reporting in

32) If it is a case decided by a presidential decree such as a case that needs special skill for the measure, it is possible to extend the period of measure by up to six months with the approval of the mayor, the provincial governor, or the head of a large city (Article 8-2 (3) of the Malodor Prevention Act).

an area other than malodor management areas.

**▶ Related regulations**

- Article 8 (4) and Article 8-2 (3) of the Malodor Prevention Act

**<Note> Matters to be included in a malodor prevention plan**

- Article 11 (1) and Attached Table No. 4 of the Enforcement Rules of the Malodor Prevention Act
- It is necessary to include the most appropriate measures for malodor prevention among the following measures in order to observe the standards for permission of malodor emission and the strict standards for permission of emission:<sup>33)</sup>

Measure	Details
Installation of malodor prevention facility	<ul style="list-style-type: none"> <li>• Install the appropriate facility among the following malodor prevention facilities:                             <ul style="list-style-type: none"> <li>- Facility using combustion</li> <li>- Facility using absorption</li> <li>- Facility using adsorption</li> <li>- Facility using catalyst reaction</li> <li>- Facility using condensation</li> <li>- Facility using oxidation and reduction</li> <li>- Facility using microorganism</li> </ul> </li> </ul>
Scattering deodorant, etc.	Eliminating malodor by scattering deodorant or air freshener whose performance has been confirmed
Others	Measures taken for the control or prevention of malodor by closing the storage facility, installing a floating cover or a top cover, or washing

33) If it is deemed difficult to conserve the living environment of the residents through the standards for permission of malodor emission, the mayor, the provincial governor, or the head of a large city may establish stricter standards for permission of malodor emission by ordinance within the scope of the order of the Ministry of Environment for the facilities decided by a presidential decree (Article 7 (2) of the Malodor Prevention Act, Article 1-2 (1) of its Enforcement Decree, and Article 8 (1) and Attached Table No. 3 of its Enforcement Rules).

# 09 Installation and operation of facilities discharging persistent organic pollutants

## 01 Summary

- A person who is intending to obtain permission for the installation of environmental pollutants discharge facility as stipulated in other laws shall be equipped with facilities that satisfy the standards for permission of discharge according to Article 14 of the Persistent Organic Pollutants Control Act (hereinafter referred to as "standards for permission of discharge of persistent organic pollutants") in addition to the facilities stipulated in the laws concerned.
- When operating a persistent organic pollutants discharge facility, it is necessary to observe the standards for permission of discharge of persistent organic pollutants.
- In addition, a persistent organic pollutants discharge facility shall measure the persistent organic pollutants discharged from the facility. When operating a persistent organic pollutants discharge facility larger than a certain size, it is necessary to examine the influence on the neighboring area.

### Installation of malodor-emitting facility

To observe the standards for installation of persistent organic pollutants discharge facility

### Operation of malodor-emitting facility

- To observe the standards for discharge of persistent organic pollutants
- Self-measurement
- To investigate the impact on the neighboring area

## 02 Terminology

Term	Definition																		
Persistent organic pollutant	<p>A substance decided by the Stockholm Convention on Persistent Organic Pollutants to be endangering human beings as well as the ecosystem with characteristics of toxicity, persistency, bioaccumulation, and long-distance mobility such as dioxin, with the specific substances to be decided by a presidential order. (Article 2, Subparagraph 1 of the Persistent Organic Pollutants Control Act and Article 2, Subparagraph 1 and Attached Table No. 1 of its Enforcement Decree)</p> <p><b>&lt;Note&gt;</b> (Stockholm Convention on Persistent Organic Pollutants) The international convention prohibiting or restricting the manufacture, use, and export and import of the designated substances in order to reduce persistent organic pollutants; adopted in May 2001, took effect in May 2004.</p>																		
Persistent organic pollutants discharge facilities	<p>Any facilities, machinery, tool, or others emitting persistent organic pollutants as prescribed by the Ordinance of the Ministry of Environment (Article 2, Subparagraph 2 of the Persistent Organic Pollutants Control Act, Article 2 and Attached Table No. 1 of its Enforcement Rules)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #2e8b57; color: white;">Discharge facility</th> <th style="background-color: #2e8b57; color: white;">Details</th> </tr> </thead> <tbody> <tr> <td style="background-color: #f5f5dc; text-align: center;">Iron and steel manufacturing facility</td> <td> <ul style="list-style-type: none"> <li>Electric arc furnace with capacity of 300 kW or more per hour</li> <li>Sintering furnace using 30 kg or more of fuel per hour or with capacity of 1 m<sup>3</sup> or more</li> </ul> </td> </tr> <tr> <td style="background-color: #f5f5dc; text-align: center;">Aluminum rolling, pressing, and elongated products manufacturing facility</td> <td> <ul style="list-style-type: none"> <li>Electric arc furnace with capacity of 300 kW or more per hour (including induction furnace)</li> </ul> </td> </tr> <tr> <td style="background-color: #f5f5dc; text-align: center;">Aluminum smelting, refining, and alloy manufacturing facility</td> <td> <ul style="list-style-type: none"> <li>Reverberating furnace with surface area of 4.5 m<sup>2</sup> or more</li> <li>Crucible furnace with 0.5 tons or more of one-time fueling or which uses 30 kg or more of fuel per hour</li> </ul> </td> </tr> <tr> <td style="background-color: #f5f5dc; text-align: center;">Copper smelting, refining, and alloy manufacturing facility</td> <td> <ul style="list-style-type: none"> <li>Electric furnace, finery, roaster, smelting or melting furnace, electrolytic furnace, or drying furnace using 30 kg or more of fuel per hour or which has a capacity of 1 m<sup>3</sup> or more</li> </ul> </td> </tr> <tr> <td style="background-color: #f5f5dc; text-align: center;">Copper rolling, pressing, and elongated products manufacturing facility</td> <td></td> </tr> <tr> <td style="background-color: #f5f5dc; text-align: center;">Cement manufacturing facility</td> <td> <ul style="list-style-type: none"> <li>Firing structure using 30 kg or more of fuel per hour or which has a capacity of 3 m<sup>3</sup> or more</li> </ul> </td> </tr> <tr> <td style="background-color: #f5f5dc; text-align: center;">Petrochemical basic chemical substances manufacturing facility</td> <td> <ul style="list-style-type: none"> <li>Ethylene dichloride and vinyl chloride manufacturing facility using 30 kg or more of fuel per hour or which has a capacity of 1 m<sup>3</sup> or more</li> </ul> </td> </tr> <tr> <td style="background-color: #f5f5dc; text-align: center;">Incineration facility</td> <td> <ul style="list-style-type: none"> <li>Waste incineration facility with hourly incineration capacity of 25 kg or more (including water incineration heat recovery facility)</li> </ul> </td> </tr> </tbody> </table>	Discharge facility	Details	Iron and steel manufacturing facility	<ul style="list-style-type: none"> <li>Electric arc furnace with capacity of 300 kW or more per hour</li> <li>Sintering furnace using 30 kg or more of fuel per hour or with capacity of 1 m<sup>3</sup> or more</li> </ul>	Aluminum rolling, pressing, and elongated products manufacturing facility	<ul style="list-style-type: none"> <li>Electric arc furnace with capacity of 300 kW or more per hour (including induction furnace)</li> </ul>	Aluminum smelting, refining, and alloy manufacturing facility	<ul style="list-style-type: none"> <li>Reverberating furnace with surface area of 4.5 m<sup>2</sup> or more</li> <li>Crucible furnace with 0.5 tons or more of one-time fueling or which uses 30 kg or more of fuel per hour</li> </ul>	Copper smelting, refining, and alloy manufacturing facility	<ul style="list-style-type: none"> <li>Electric furnace, finery, roaster, smelting or melting furnace, electrolytic furnace, or drying furnace using 30 kg or more of fuel per hour or which has a capacity of 1 m<sup>3</sup> or more</li> </ul>	Copper rolling, pressing, and elongated products manufacturing facility		Cement manufacturing facility	<ul style="list-style-type: none"> <li>Firing structure using 30 kg or more of fuel per hour or which has a capacity of 3 m<sup>3</sup> or more</li> </ul>	Petrochemical basic chemical substances manufacturing facility	<ul style="list-style-type: none"> <li>Ethylene dichloride and vinyl chloride manufacturing facility using 30 kg or more of fuel per hour or which has a capacity of 1 m<sup>3</sup> or more</li> </ul>	Incineration facility	<ul style="list-style-type: none"> <li>Waste incineration facility with hourly incineration capacity of 25 kg or more (including water incineration heat recovery facility)</li> </ul>
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## 09 Installation and operation of facilities discharging persistent organic pollutants

### 03 Installation and operation of persistent organic pollutants discharge facility

#### A. Compliance with standards for installation of persistent organic pollutants discharge facility

- A person who is intending to report or obtain permission or approval for the installation of environmental pollutants discharge facility stipulated in other laws shall be equipped with the facilities that satisfy the standards for permission of discharge of persistent organic pollutants in addition to the facilities stipulated in the relevant laws.

- ▶ **Related regulations** Article 15 of the Persistent Organic Pollutants Control Act
- ▶ **Approval or permission in other laws as the object of observance of standards for installation of persistent organic pollutants discharge facility**
  - Permission and report of installation of air pollutions discharge facility or permission and report of change thereof according to Article 23 (1) through (3) of the Clean Air Conservation Act
  - Permission and report of installation of water pollutants discharge facility or permission and report of change thereof according to Article 33 (1) through (3) of the Water Environment Conservation Act
  - Permission of waste treatment business or permission and report of change thereof according to Article 25 (3) or (11) of the Wastes Control Act
  - Approval and report of installation of waste treatment facility or approval and report of change thereof according to Article 29 (2) or (3) of the Wastes Control Act

#### B. Matters to be observed when operating a persistent organic pollutants discharge facility

- When operating a persistent organic pollutants discharge facility, it is necessary to observe the standards for permission of discharge for the persistent organic pollutants discharged from the same facility in waste gas, wastewater, etc.

- ▶ **Related regulations** Article 14 (3) of the Persistent Organic Pollutants Control Act

- It is required to measure the persistent organic pollutants discharged from the persistent organic pollutants discharge facility by self-measurement or by using a measurement agency<sup>34)</sup> and keep the relevant records for five years from the date of measurement.

▶ **Related regulations** Article 19 (1) of the Persistent Organic Pollutants Control Act and Article 14 (2), (3) and Attached Table No. 6 of its Enforcement Rules

▶ **Measurement frequency and measured substances**

Medium	Persistent organic pollutants discharge facility	What to measure	Measurement frequency	Measured substance
Waste gas	Incineration facility	Treatment capacity of 2 tons/hr or more	At least every 6 months	Dioxin
		Treatment capacity of 0.2 tons/hr or more	At least once a year	
		Treatment capacity of 25 kg/hr or more	At least once every two years	
	Facilities other than incineration facility	Generated dioxin of 25 g-TEQ/yr or more	At least once every 6 months	
		Generated dioxin of 4 g-TEQ/yr or more	At least once a year	
		Generated dioxin of less than 4 g-TEQ/yr	At least every two years	
Wastewater	All facilities	Ethylene dichloride and vinyl chloride manufacturing facility	At least every 6 months	
		All facilities other than those indicated above	At least once a year	

- When operating a persistent organic pollutants discharge facility that has significant influence on the neighboring area, it is necessary to investigate

34) The Korea Environment Corporation publicly announced by the president of the National Institute of Environmental Research as the agency for the measurement of persistent organic pollutants among Korea Environment Corporation and Public Health and Environment Research Institute and other agencies decided and publicly announced by the president of the National Institute of Environmental Research (Article 14 (1) of the Enforcement Rules of the Persistent Organic Pollutants Control Act)

## 09 Installation and operation of facilities discharging persistent organic pollutants

the impact on the neighboring area once every three years independently or jointly or using a measurement agency<sup>35)</sup> and submit the results to the head of the basin environmental office or the head of the regional environmental office within 30 days of completion of the investigation.

▶ **Related regulations** Article 19 (2) of the Persistent Organic Pollutants Control Act, Article 21 (1), (2) of its Enforcement Decree, and Article 15 (1) and its Attached Table No. 7 and Article 15 (2) of its Enforcement Rules

### ▶ Related regulations

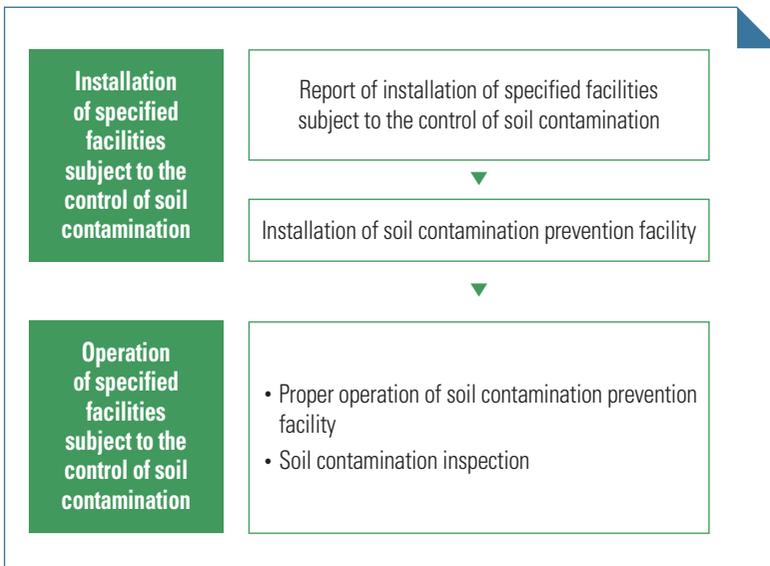
	Facility subject to investigation	Number and times of investigation
Details	<ul style="list-style-type: none"> <li>• Steel sintering furnace with maximum daily production capacity of 5,000 tons or more</li> <li>• Steel electric furnace with maximum daily production capacity of 3,000 tons or more</li> <li>• Cement roaster furnace with maximum daily production capacity of 12,000 tons or more</li> <li>• Copper rolling, pressing, and elongation facility with maximum daily production capacity of 50 tons or more</li> </ul> <p>&lt;Note&gt; If there are many persistent organic pollutants discharge facilities in the place of business, the maximum daily production capacity is calculated by totaling their maximum daily production capacity.</p>	At least every 3 years in winter (from December to February of the following year)

35) The Korea Environment Corporation publicly announced by the president of the National Institute of Environmental Research as the agency for the measurement of persistent organic pollutants among Korea Environment Corporation and Public Health and Environment Research Institute and other agencies decided and publicly announced by the president of the National Institute of Environmental Research (Article 14 (1) of the Enforcement Rules of the Persistent Organic Pollutants Control Act)

# 10 Installation and operation of facilities for specified soil contamination management

## 01 Summary

- A person who is intending to install the specified facilities subject to the control of soil contamination shall report such to the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu or report a change, if any, in order to change the reported matters.
- When installing and operating the specified facilities subject to the control of soil contamination, it is necessary to install a soil contamination prevention facility and maintain and manage it adequately.
- In addition, a professional agency handling soil contamination should conduct soil contamination inspection on the site of the facility concerned and the neighboring area.



## 10 Installation and operation of facilities for specified soil contamination management

### 02 Terminology

Term	Definition								
Soil contamination	Contamination of soil caused by business or other human activities and which damages the health and property of the people or the environment (Article 2, Subparagraph 1 of the Soil Environment Conservation Act)								
Soil contaminants	Any substance causing soil contamination as prescribed by the Ordinance of the Ministry of Environment (Article 2, Subparagraph 2 of the Soil Environment Conservation Act, Article 1-2 and Attached Table No. 1 of its Enforcement Rules)								
Facilities subject to the control of soil contamination	Any facilities, equipment, buildings, structures, and others determined by the Ordinance of the Ministry of Environment to be suspected of contaminating the soil through the production, transportation, storage, treatment, process, disposal, etc. of soil contaminants (Article 2, Subparagraph 3 of the Soil Environment Conservation Act)								
Specified facilities subject to the control of soil contamination	Facilities subject to the control of soil contamination and feared to contaminate the soil seriously as specified by the Ordinance of the Ministry of Environment (Article 2, Subparagraph 4 of the Soil Environment Conservation Act and Article 1-3 and Attached Table No. 2 of its Enforcement Rules)								
	<table border="1"> <thead> <tr> <th>Facility</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>Petroleum products manufacturing and storage facility</td> <td>A storage facility installed for the production, storage, and treatment of flammable liquid of No. 1 to No. 4 petroleum products among the Type 4 hazardous materials in Attached Table 1 of the Enforcement Decree of the Act on the Safety Control of Hazardous Substances and whose capacity is 20,000 liters or more (except movable tank storage facility)</td> </tr> <tr> <td>Hazardous chemicals manufacturing and storage facility</td> <td>A facility storing soil contaminants among the storage facilities installed by a person who is permitted to deal with hazardous chemicals according to Article 28 of the Chemical Substances Control Act (limited to TCE and PCE storage facility in the case of organic solvents)</td> </tr> <tr> <td>Oil pipeline facility</td> <td>The pipe and tank used for the transportation of oil among the pipeline facilities stipulated in Article 2, Subparagraph 2 of the Oil Pipeline Safety Control Act</td> </tr> </tbody> </table>	Facility	Details	Petroleum products manufacturing and storage facility	A storage facility installed for the production, storage, and treatment of flammable liquid of No. 1 to No. 4 petroleum products among the Type 4 hazardous materials in Attached Table 1 of the Enforcement Decree of the Act on the Safety Control of Hazardous Substances and whose capacity is 20,000 liters or more (except movable tank storage facility)	Hazardous chemicals manufacturing and storage facility	A facility storing soil contaminants among the storage facilities installed by a person who is permitted to deal with hazardous chemicals according to Article 28 of the Chemical Substances Control Act (limited to TCE and PCE storage facility in the case of organic solvents)	Oil pipeline facility	The pipe and tank used for the transportation of oil among the pipeline facilities stipulated in Article 2, Subparagraph 2 of the Oil Pipeline Safety Control Act
	Facility	Details							
	Petroleum products manufacturing and storage facility	A storage facility installed for the production, storage, and treatment of flammable liquid of No. 1 to No. 4 petroleum products among the Type 4 hazardous materials in Attached Table 1 of the Enforcement Decree of the Act on the Safety Control of Hazardous Substances and whose capacity is 20,000 liters or more (except movable tank storage facility)							
	Hazardous chemicals manufacturing and storage facility	A facility storing soil contaminants among the storage facilities installed by a person who is permitted to deal with hazardous chemicals according to Article 28 of the Chemical Substances Control Act (limited to TCE and PCE storage facility in the case of organic solvents)							
Oil pipeline facility	The pipe and tank used for the transportation of oil among the pipeline facilities stipulated in Article 2, Subparagraph 2 of the Oil Pipeline Safety Control Act								
Other facilities similar to those indicated above and subject to management as publicly announced by the Minister of Environment for special management through consultation with the head of the related central administrative agency									
Soil contamination inspection	Refers to soil contamination inspection and leak inspection (Article 2, Subparagraph 1 of the guidelines for the management of specified facilities subject to the control of soil contamination, No. 597 of the Established Rules of the Ministry of Environment)								

Term	Definition
Soil contamination level inspection	The inspection conducted for the confirmation of the amount of soil contaminants by collecting soil samples (Article 2, Subparagraph 2 of the guidelines for the management of specified facilities subject to the control of soil contamination, No. 597 of the Established Rules of the Ministry of Environment)
Leak inspection	The inspection conducted for the confirmation of any leak of the stored materials due to damage to the storage facility and the transportation pipe (Article 2, Subparagraph 3 of the guidelines for the management of specified facilities subject to the control of soil contamination and No. 597 of the Established Rules of the Ministry of Environment)

### 03 Installation and operation of specified facilities subject to the control of soil contamination

#### A. Report of installation of specified facilities subject to the control of soil contamination

- A person who is intending to install the specified facilities subject to the control of soil contamination shall report the details of the facilities concerned and the plan to install a soil contamination prevention facility to the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu.

▶ **Related regulations** Article 12 (1) of the Soil Environment Conservation Act, Article 6 (1) of its Enforcement Decree, and Article 8 of its Enforcement Rules

▶ **Required documents**

- Report of installation of specified facilities subject to the control of soil contamination (Attached Form No. 4 of the Enforcement Rules of the Soil Environment Conservation Act)
- Drawings on the location, structure, and equipment of specified facilities subject to the control of soil contamination
- Permission for installation of hazardous materials production factory, storage and handling facility and detailed statement on the structure and equipment of each storage facility

## 10 Installation and operation of facilities for specified soil contamination management

- Other necessary matters recognized by the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu for the prevention of soil contamination

### B. Report of change of specified facilities subject to the control of soil contamination

- It is necessary to report a change of the matters reported for installation of specified facilities subject to the control of soil contamination to the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu within 30 days of the day of occurrence.

- ▶ **Related regulations** Article 12 (1) of the Soil Environment Conservation Act, Article 6 (2) of its Enforcement Decree, and Articles 8-2 and 9 of its Enforcement Rules

#### ▶ Changes to be reported

	Changes to be reported
Report of change	<ul style="list-style-type: none"> <li>• Change of the workplace or its representative</li> <li>• Expiration of use or closure of specified facilities subject to the control of soil contamination</li> <li>• Replacement of specified facilities subject to the control of soil contamination or change of soil contamination prevention facility</li> <li>• Change of soil contaminants stored in specified facilities subject to the control of soil contamination</li> <li>• Expansion of the storage capacity of specified facilities subject to the control of soil contamination by 30% or more of the reported capacity (including expansion of 30% or more as a result of accumulation of expansions each less than 30% of the reported capacity)</li> </ul>

#### ▶ Required documents

- Report of change of specified facilities subject to the control of soil contamination (Attached Form No. 5 of the Enforcement Rules of the Soil Environment Conservation Act)
- Original certificate of report of installation of specified facilities subject to the control of soil contamination
- Documents proving the change

**<Note> Fictitious report, etc. by other laws, etc.**

- Fictitious report of specified facilities subject to the control of soil contamination by other laws
  - ▶ **Related regulations** Article 12 (2) of the Soil Environment Conservation Act and Article 10-2 (1) of its Enforcement Rules
  - ▶ **Details** Specified facilities subject to the control of soil contamination permitted or registered for installation according to the Act on the Safety Control of Hazardous Substances, the Chemical Substances Control Act, and the Oil Pipeline Safety Control Act shall be deemed to have been reported as specified facilities subject to the control of soil contamination according to Article 10 (1) of the Soil Environment Conservation Act.
  
- Fictitious report of change in other laws according to the report of change of specified facilities subject to the control of soil contamination
  - ▶ **Related regulations** Article 12-2 (1), (2) of the Soil Environment Conservation Act
  - ▶ **Details** If a report is made for the change of name of the workplace or its representative, the following reports of change shall be deemed to have been done (to obtain the counted report of change, it is necessary to submit the related documents stipulated by the relevant laws, too):
    - Report of change of wastewater discharge facility according to the Proviso of Article 33 (2) and Article 33 (3) of the Water Environment Conservation Act
    - Report of change of volatile organic compounds discharge facility according to Article 44 (2) of the Clean Air Conservation Act

**C. Installation and maintenance and management of soil contamination prevention facility**

- Article 12 (3) of the Soil Environment Conservation Act, Article 7 (1) and (2) of the Enforcement Decree of the Act

- ▶ **Standards for installation and maintenance and management of soil contamination prevention facility**

Article 12 (1) of the Soil Environment Conservation Act and Article 7 (1), (2) of its Enforcement Decree

## 10 Installation and operation of facilities for specified soil contamination management

- Take measures for the prevention of corrosion and oxidation of specified facilities subject to the control of soil contamination and use a material that can prevent leakage or install a leakage prevention facility such as a double-wall tank for the prevention of leakage of soil contaminants and maintain and manage it adequately.
- For the storage facilities buried underground among the specified facilities subject to the control of soil contamination, install a measurement device for the detection or confirmation of leakage of soil pollutants and maintain and manage it adequately.
- Install a facility necessary for the prevention of spread of contamination, reduction of toxicity, etc. in preparation for leakage of soil contaminants from specified facilities subject to the control of soil contamination and maintain and manage it adequately.
- For more detailed standards for the installation, maintenance, and management of soil contamination prevention facility, refer to the public announcement on the method of purification of soil contamination prevention facility and contaminated soil at the specified facilities subject to the control of soil contamination (Attached Table No. 1 of the Ministry of Environment Public Notice No. 2018-187).

### D. Soil contamination inspection

- The site of the facility concerned and the neighboring area should undergo soil contamination inspection by a professional agency specializing in soil.

▶ **Related regulations** Types of soil contamination inspection (regular/frequent inspection), inspection cycle, etc.

- Article 13 (1) of the Soil Environment Conservation Act
- Article 8 (1), (2) of the Enforcement Decree of the Soil Environment Conservation Act
- Article 12 (1), (2) and Attached Table No. 4 of the Enforcement Rules of the Soil Environment Conservation Act

- Also, the soil contamination inspection report shall be kept for five years.

▶ **Related regulations** Article 13 (4) of the Soil Environment Conservation Act and Article 16 of its Enforcement Rules

- If a facility qualifies for exemption, soil contamination inspection can be waived with the approval of the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu following the submission of related documents.

▶ **Related regulations** Proviso of Article 13 (1) of the Soil Environment Conservation Act, Article 8-2 (1) of its Enforcement Decree, and Article 15 of its Enforcement Rules

▶ **Requirement for exemption from soil contamination inspection**

- Where a device is installed for the confirmation of leakage of oil from oil pipeline (applied only to soil contamination inspection), or a safety inspection is done (applied only to leakage inspection)
- Where it is recognized by the soil contamination inspection agency that it is impossible to collect soil samples due to installation on a ground that is not available for drilling or at the basement of a building
- Where it is recognized by a professional agency specializing in soil that it is not necessary to conduct a soil contamination inspection, including a facility that has not stored soil contaminants for one year or longer in the storage facility
- Where, among the many facilities storing the same kind of soil pollutant, the use of some facilities has been stopped or they have been closed (applied only to soil contamination level inspection)
- Where 15 years have not passed from the date of installation of the soil contamination prevention facility according to the recommended standards for installation, maintenance, and management (applied only to regular soil inspection)
- If it is intended to change the stored material into a soil contaminant of the same kind of inspection item (applied only to soil contamination level inspection)
- If it is recognized by the mayor of the special autonomous city, the governor of the special self-governing province, the mayor, the county governor, or the head of a Gu that soil contamination inspection is not necessary as purification is underway by the order for soil purification, etc.

▶ **Required documents**

- Application for approval of exemption from soil contamination inspection (Attached Form No. 7-2 of the Enforcement Rules of the Soil Environment Conservation Act)
- Documents proving satisfaction of the requirement for exemption from soil contamination inspection

**<Note> Types of professional agencies specializing in soil and qualifications**

▶ **Related regulations** Article 23-2 (1), (2) of the Soil Environment Conservation Act

▶ **Types**

- Soil environment evaluation agency: an agency evaluating the soil environment

## 10 Installation and operation of facilities for specified soil contamination management

- Hazard evaluation agency: an agency evaluating hazards
- Soil contamination investigation agency: an agency performing the following:
  - Precise soil investigation
  - Soil contamination level investigation
  - Verification of soil purification
  - Guidance and supervision of soil contamination improvement project
  - Other investigations conducted to identify the level of soil contamination according to this law or other laws and regulations
- Leak inspection agency: an agency conducting leakage inspection during a soil contamination investigation
- ▶ **Qualifications** To be designated by the Minister of Environment, the mayor, or the provincial governor after being equipped with inspection facility<sup>36)</sup>, equipment, and technical manpower to be a professional agency specializing in soil
- Soil environment evaluation agency and hazard evaluation agency: Minister of Environment
- Soil contamination investigation agency and leakage inspection agency: Mayor or provincial governor

36) Qualifications for professional agency specializing in soil (inspection facility, equipment, and technical manpower) are stipulated in Article 17-2 (1) and Attached Table No. 1 of the Enforcement Decree of the Soil Environment Conservation Act.

# Installation and operation of waste treatment facility

## 01 Summary

- A person who is intending to install a waste treatment facility<sup>37)</sup> shall report such to, or obtain permission from, the mayor or the provincial governor, the head of the basin environmental office, and the head of the regional environmental office.
- In order to begin using the waste treatment facility upon completion of the construction work for installation after reporting or obtaining permission for installation, it is necessary to report such to the mayor or the provincial governor, the head of the basin environmental office, and the head of the regional environmental office.
- For the installation and operation of a waste treatment facility, it is necessary to undergo regular inspection, maintain and manage the waste treatment facility properly according to the standards for management of waste treatment facility, and measure the pollutants regularly in the case of landfills.
- It is also necessary to appoint a technical manager for the installation and operation of a waste treatment facility beyond a certain size.
- In addition, it is necessary to keep records of the generation, discharge, and treatment of wastes, and the person in charge should be educated by a training institute.



<sup>37)</sup> Hereinafter, waste treatment facility that obtained permission for wastewater treatment business according to Article 25 (3) of the Wastes Control Act or is to be installed to obtain such permission shall be excluded

## 11 Installation and operation of waste treatment facility

### 02 Terminology

Term	Definition
Waste	Materials that are no longer useful for human life or business activities, such as garbage, burnt refuse, sludge, waste oil, waste acid, waste alkali, and carcasses of animals (Article 2, Subparagraph 1 of the Wastes Control Act)
Industrial waste	Any waste generated from business places with discharge or emission facilities installed and managed in accordance with the Clean Air Conservation Act, the Water Environment Conservation Act, or the Noise and Vibration Control Act or any other business places specified by the Presidential Decree (Article 2, Subparagraph 3 of the Wastes Control Act and Article 2 of its Enforcement Decree)
Designated waste	The industrial waste specifically enumerated by the Presidential Decree as harmful substances, such as waste oil and waste acid that may contaminate the surrounding environment, or medical waste that may cause harm to the human body (Article 2, Subparagraph 4 of the Wastes Control Act and Article 3 and Attached Table No. 1 of its Enforcement Decree)
Medical waste	Any of the wastes specifically enumerated by the Presidential Decree among those discharged from public health and medical institutions, veterinary clinics, testing and inspection institutions, and other similar institutions and which may cause harm to the human body by infection or otherwise, thereby requiring special control for public health and environmental conservation, such as parts and extracts of human body and carcasses of laboratory animals (Article 2, Subparagraph 5 of the Wastes Control Act and Article 4 and Attached Table No. 2 of its Enforcement Decree)
Disposal	Both interim treatment - such as incineration, neutralization, fragmentation, and solidification - and terminal treatment such as landfill and discharging into the sea (Article 2, Subparagraph 6 of the Wastes Control Act)
Recycling	① Reusing or reclaiming wastes or making wastes reusable or reclaimable; ② Recovering the energy prescribed in Article 2, Subparagraph 1 of the Energy Act or making such energy recoverable from wastes, or using wastes as fuel as prescribed by the Ordinance of the Ministry of Environment (Article 2, Subparagraph 7 of the Wastes Control Act and Article 3 (1) of its Enforcement Rules)
Waste treatment facility	Both interim and terminal waste disposal facilities and waste recycling facilities as specified by Presidential Decree (Article 2, Subparagraph 8 of the Wastes Control Act and Article 5 and Attached Table No. 3 of its Enforcement Decree)

## 03 Installation of waste treatment facility

### A. Approval and report of installation of waste treatment facility

- A person who is intending to report, or obtain approval for, the installation of a waste treatment facility shall submit related documents to the mayor or the provincial governor, the head of the basin environmental office, and the head of the regional environmental office.

**▶ Attention** Authorities approving or receiving a report of installation of a waste treatment facility

- ▶ **Related regulations** Article 62 (1) of the Wastes Control Act and Article 37 (1) 3, Article 37 (2) 3 of its Enforcement Decree
- ▶ **Entitled authorities** classified according to the types of waste treated at the waste treatment facility<sup>38)</sup>

	Head of basin environmental office/Head of regional environmental office	Mayor/Provincial governor
Facility	<ul style="list-style-type: none"> <li>• A waste treatment facility treating designated wastes (except medical wastes) (including the facility treating both designated wastes and wastes other than designated wastes at the same waste treatment facility)</li> <li>• A waste treatment facility treating the medical wastes generated at general hospitals</li> </ul>	<ul style="list-style-type: none"> <li>• The waste treatment facility treating wastes except for the authority given by the head of the basin environmental office and the head of the regional environmental office</li> </ul>

- ▶ **Related regulations** Article 29 (2) of the Wastes Control Act and Article 38, Article 39 (1), and Article 40 (1) of its Enforcement Rules

▶ **Facilities subject to approval and report<sup>39)</sup>**

	Facility	Capacity	Approval	Report
Facilities subject to approval and report	General incineration facility	Daily disposal capacity	100 tons (10 tons for designated wastes) and over	Less than 100 tons (10 tons for designated wastes)

38) Refer to the guidelines for handling the approval and report of installation of waste treatment facilities (No. 583 of the Established Rules of the Ministry of Environment)

39) Refer to the guidelines for handling the approval and report of installation of waste treatment facilities (No. 583 of the Established Rules of the Ministry of Environment)

## 11 Installation and operation of waste treatment facility

	Facility	Capacity	Approval	Report
Facilities subject to approval and report	High-temperature incineration facility, pyrolysis facility, high-temperature melting facility, thermal treatment combination facility	Hourly disposal capacity	100 kg and over	Less than 100 kg
	Evaporation, concentration, refining, or oil separation facility among mechanical disposal facilities or recycling facilities	Hourly disposal capacity or recycling capacity	125 kg and over	Below 125 kg
	Compression, pressing, molding, casting, crushing, pulverizing, skinning, cutting, smelting, melting, fueling, and roasting (except cement roaster furnace) or carbonizing facility among mechanical disposal facilities or recycling facilities	Daily disposal capacity or recycling capacity	100 tons and over	Below 100 tons
	Biological disposal facility or recycling facility	Daily disposal capacity or recycling capacity	100 tons and over	Below 100 tons
	Landfill	-	All	None
	Cement roaster furnace	-	All	None
	Dehydration and drying facility, sterilization and crushing facility, chemical disposal facility, or recycling facility among mechanical disposal facilities or recycling facilities	-	None	All

► Required documents

	Required documents
Approval	<ul style="list-style-type: none"> <li>• Application for approval of installation of waste disposal facility or recycling facility (Attached Form 23 of the Enforcement Rules of the Wastes Control Act)</li> <li>• Production process chart and detailed statement of discharge of waste of company discharging wastes subject to disposal or discharge (only for the installation of waste treatment facility by the person who discharges industrial wastes)</li> <li>• Detailed statement of the types, property, and status of wastes and the forecast discharge quantity (applied only to the facility installed by the person who discharges industrial wastes)</li> <li>• Plan to dispose of or recycle the wastes subject to disposal or recycling (including the use or method of recycling if the facility is for recycling)</li> <li>• Plan to install the waste disposal facility or recycling facility and procure the equipment</li> <li>• Design documents and drawings of the waste disposal facility or recycling facility (including material balance if the facility is for the disposal of food waste or recycling)</li> <li>• Plan to dispose of or reuse the wastes generated after disposal or recycling</li> <li>• Agreement on sharing the expenses for installation and operation of the joint waste disposal facility or recycling facility (applied only to the case of installing and operating the waste treatment facility jointly according to Article 18 (5) of the Wastes Control Act)</li> <li>• Follow-up management plan for waste landfill facility</li> <li>• Environmental report on the installation of the facility including matters publicly announced by the Minister of Environment<sup>40</sup>. (Applicable only to a landfill facility with area of 10,000 m<sup>2</sup> or more or landfill capacity of 30,000 m<sup>3</sup> or more, an incineration facility with daily disposal capacity of 100 tons or more (10 tons for designated wastes), an incineration heat recovery facility with daily recycling capacity of 100 tons or more, or a cement roaster furnace using wastes for fuel. Note, however, that it is possible for a project subject to environmental impact assessment report by the Environmental Impact Assessment Act to replace such with an environmental impact assessment report)</li> <li>• Documents attached at the time of report or application for permission of installation of air pollutants discharge facility, etc. (if applicable)</li> </ul>

40) Matters to be included in the Environmental Report (Ministry of Environment Public Notice No. 2015-200)



## Installation and operation of waste treatment facility

	Required documents
Report	<ul style="list-style-type: none"> <li>• A report on the installation of waste disposal facility or recycling facility (Attached Form No. 25 of the Enforcement Rules of the Wastes Control Act)</li> <li>• Plan to install the waste disposal facility or recycling facility and procure the equipment</li> <li>• Environmental report on the installation of the facility including matters publicly announced by the Minister of Environment<sup>41)</sup>. (Applicable only to an incineration facility or an incineration heat recovery facility with daily incineration capacity of 50 tons or more)</li> <li>• Agreement on sharing the expenses for the installation and operation of joint waste disposal facility or recycling facility (applied only to the case of installing and operating the waste treatment facility jointly according to Article 18 (5) of the Wastes Control Act)</li> <li>• Documents attached at the time of report or application for permission of installation of air pollutants discharge facility, etc. (if applicable)</li> </ul>

- A school or a research institute that is intending to install and operate a waste treatment facility for testing or research is exempted from approval or report of installation of waste treatment facility. In this case, it is necessary to submit the plan for installation and operation of the waste disposal facility or the recycling facility to the mayor or the provincial governor, the head of the basin environmental office, and the head of the regional environmental office.

▶ **Related regulations** Article 29 (2) 1 of the Wastes Control Act and Article 37 (1) of its Enforcement Rules

▶ **Exemption from approval and report of waste treatment facility**

- An institute stipulated in Article 5 (1) of the Environmental Technology and Industry Support Act
- University, industrial university, junior college, technical college, and affiliated research institute
- National and public research institute
- Company affiliated research center and corporate R&D department stipulated in Article 14 (1) 2 of the Basic Research Promotion and Technology Development Support Act

41) Matters to be included in the Environmental Report (Ministry of Environment Public Notice No. 2015-200)

- An industrial technology research cooperative stipulated in the Industrial Technology Research Cooperatives Support Act
- An institute or an organization stipulated in Article 6 (2) of the Act on the Promotion of Conversion into Environment-friendly Industrial Structure
- Other persons decided and publicly announced by the Minister of Environment

#### <Note> Fictitious approval and report by other laws and regulations

- ▶ **Related regulations** Article 32 (1) of the Wastes Control Act

#### ▶ **Details**

The permission or report of installation of waste treatment facility shall be regarded as having completed the following permission or report:

- Permission or report of installation of air pollutants discharge facility according to Article 23 (1), (2) of the Clean Air Conservation Act
- Permission or report of installation of wastewater discharge facility according to Article 33 (1), (2) of the Water Environment Conservation Act
- Permission or report of installation of noise and vibration emission facility according to Article 8 (1), (2) of the Noise and Vibration Control Act

## B. Approval and report of change of installation of waste treatment facility

- In order to change the matters permitted or reported for installation of waste treatment facility, it is necessary to obtain permission for change or report the change.
- A person who is going to obtain permission for change or report the change of the waste treatment facility shall submit the required documents to the head of the basin environmental office or the head of the regional environmental office.

#### ▶ **Related regulations**

- Article 29 (3) of the Wastes Control Act
- Article 39 (3), (4) and Article 40 (3), (4) of the Wastes Control Act



## Installation and operation of waste treatment facility

### ► Matters requiring approval and report of change

	Changes requiring approval and report	When to apply (report)
Approval	Change of company name (applied only when the facility is installed by the person who discharges industrial wastes)	Within 30 days of the day of occurrence
	Change of wastes subject to disposal or recycling	Before the change
	Change of location of the disposal facility or recycling facility	
	Increase of 30% or more of the total or accumulated capacity of the disposal or recycling facility approved for installation or change	
	Expansion or remodeling of bank of the landfill facility	
	Change of major equipment	
Report	Change of company name (applied only when the facility is installed by the person who discharges industrial wastes)	Within 30 days of the day of occurrence
	Change of location of the disposal facility or recycling facility	Before the change
	Change of wastes subject to disposal or recycling	
	Increase of 30% or more of the total or accumulated capacity of the disposal or recycling facility reported or whose change of installation is reported	
	Change of major equipment	

### ► Required documents

	Approval of change	Report of change
Documents	<ul style="list-style-type: none"> <li>Application for approval of change of installation of waste disposal facility or recycling facility (Attached Form No. 23 of the Enforcement Rules of the Wastes Control Act)</li> <li>Original approval of installation of waste disposal facility or recycling facility</li> </ul>	<ul style="list-style-type: none"> <li>Report of change of installation of waste disposal facility or recycling facility (Attached Form No. 25 of the Enforcement Rules of the Wastes Control Act)</li> <li>Original report of installation of waste disposal facility or recycling facility</li> </ul>

► **Required documents**

	Approval of change	Report of change
Documents	<ul style="list-style-type: none"> <li>• Documents proving the contents of change (for change of company name)</li> <li>• Plan to change the installation of waste disposal facility or recycling facility (for change of capacity or major equipment)</li> <li>• Documents attached at the time of application for permission of change or report of change of air pollutants discharge facility, etc. (if applicable)</li> <li>• Environmental Report (if applicable)</li> </ul>	<ul style="list-style-type: none"> <li>• Documents proving the change (for change of company name)</li> <li>• Plan to change the installation of waste disposal facility or recycling facility (for change of capacity or major equipment)</li> <li>• Documents attached at the time of application for permission of change or report of change of air pollutants discharge facility, etc. (if applicable)</li> </ul>

## 04 Operation of waste treatment facility

### A. Report of start of operation of waste treatment facility

- In order to begin using the waste treatment facility upon completion of construction work for installation after reporting or obtaining permission for installation, it is necessary to report such to the mayor or the provincial governor, the head of the basin environmental office, and the head of the regional environmental office at least 10 days before starting to use the facility.

► **Related regulations**

- Article 29 (4) of the Wastes Control Act
- Article 41 (1) of the Enforcement Rules of the Wastes Control Act

► **Required documents**

- Report of start of use of the waste disposal facility or recycling facility (No. 27 Attached Form No. 27 of the Enforcement Rules of the Wastes Control Act) or Report of start of use of the waste landfill facility (Attached Form No. 28 of the Enforcement Rules of the Wastes Control Act)



## Installation and operation of waste treatment facility

- Maintenance and management plan of the facility concerned
- For the following facilities, the inspection report issued by the waste treatment facility inspection agency:
  - Incineration facility
  - Landfill facility
  - Sterilization crushing facility (including a facility treating medical wastes as stipulated in Subparagraph 1, Item b (9) of Attached Table No. 3 of the Enforcement Decree of the Wastes Control Act)
  - Foodstuff waste treatment facility with daily treatment capacity of 100 kg or more (hereinafter referred to as "foodstuff waste treatment facility")
  - Cement roaster furnace (if wastes are used for fuel)
  - Incineration heat recovery facility

### <Note> Fictitious approval and report by other laws and regulations

- ▶ **Related regulations** Article 32 (3) of the Wastes Control Act

- ▶ **Details**

The report of start of use of waste treatment facility shall be regarded as having reported the following matters:

- Report of start of operation of air pollutants discharge facility according to Article 30 of the Clean Air Conservation Act
- Report of start of operation of wastewater discharge facility according to Article 37 of the Water Environment Conservation Act

## B. Inspection of waste treatment facility

- If a waste treatment facility including incineration facility and landfill facility is installed and operated, it should undergo inspection by an inspection agency regularly (once every certain period).

- ▶ **Related regulations**

- Article 30 (2) of the Wastes Control Act
- Article 41 (5) of the Enforcement Rules of the Wastes Control Act

▶ **Cycle of regular inspection for each type of waste treatment facility**

Facility	Initial inspection	Further inspections
Incineration facility and incineration heat recovery facility	By 30 days before or after the third anniversary of start of use <sup>42)</sup>	By 30 days before or after the third anniversary of the last regular inspection <sup>43)</sup>
Landfill facility	By 30 days before or after the first anniversary of start of use	By 30 days before or after the third anniversary of the last regular inspection
Sterilization crushing facility	3 months from the date of start of use	3 months from the last regular inspection
Foodstuff waste treatment facility	By 30 days before or after the first anniversary of start of use	By 30 days before or after the first anniversary of the last regular inspection
Cement roaster furnace	By 30 days before or after the third anniversary of start of use <sup>44)</sup>	By 30 days before or after the third anniversary of the last regular inspection

<Note> **Waste treatment facility inspection agencies**

▶ **Related regulations** Article 30 (1) of the Wastes Control Act and Article 41 (3) of its Enforcement Rules

Facility	Inspection agency
Incineration facility and incineration heat recovery facility	<ul style="list-style-type: none"> <li>• Korea Environment Corporation</li> <li>• Korea Institute of Machinery &amp; Materials</li> <li>• Korea Testing Laboratory</li> <li>• University, government-funded institute, and other organizations publicly announced by the Minister of Environment<sup>45)</sup> as those that are able to inspect incineration facilities</li> </ul>

- 42) Date when five years have passed from the date of start of use if a measuring device installed according to Article 32 of the Clean Air Conservation Act is connected with the control center and is operated normally
- 43) Date when the inspection report is issued by the inspection agency (the same in this table hereinafter)
- 44) Date when five years have passed from the date of start of use if a measuring device installed according to Article 32 of the Clean Air Conservation Act is connected with the control center and is operated normally
- 45) Designation of agency for inspection of incineration facility (Ministry of Environment Public Notice No. 2015-40)



## Installation and operation of waste treatment facility

Facility	Inspection agency
Incineration facility and incineration heat recovery facility	<ul style="list-style-type: none"> <li>• Korea Environment Corporation</li> <li>• Korea Institute of Machinery &amp; Materials</li> <li>• Korea Testing Laboratory</li> <li>• University, government-funded institute, and other organizations publicly announced by the Minister of Environment<sup>45)</sup> as those that are able to inspect incineration facilities</li> </ul>
Landfill facility	<ul style="list-style-type: none"> <li>• Korea Environment Corporation</li> <li>• Korea Institute of Civil Engineering and Building Technology</li> <li>• Korea Rural Community Corporation</li> <li>• SUDOKWON Landfill Site Management Corporation</li> </ul>
Sterilization crushing facility	<ul style="list-style-type: none"> <li>• Korea Environment Corporation</li> <li>• Public Health and Environment Research Institute</li> <li>• Korea Testing Laboratory</li> </ul>
Foodstuff waste treatment facility	<ul style="list-style-type: none"> <li>• Korea Environment Corporation</li> <li>• Korea Testing Laboratory</li> <li>• Other organizations decided and publicly announced by the Minister of Environment</li> </ul>
Sterilization crushing facility	<ul style="list-style-type: none"> <li>• (Inspection of standards for energy recovery) Korea Environment Corporation, Korea Institute of Machinery &amp; Materials, Korea Institute of Energy Research, etc.</li> <li>• (Other inspections) Korea Environment Corporation, Korea Institute of Machinery &amp; Materials, Korea Testing Laboratory, etc.</li> </ul>

### C. Compliance with standards for management of waste treatment facility

- A person who installs and operates a waste treatment facility shall maintain and manage the facility concerned according to the standards for management of waste treatment facility.

#### ▶ Related regulations

- Article 31 (1) of the Wastes Control Act
- Article 42 (1) and Attached Table No. 11 of the Enforcement Rules of the Wastes Control Act

### D. Measurement of pollutants of waste treatment facility (landfill facility)

- When installing and operating a landfill facility, it is necessary to measure pollutants or entrust a measuring agency with the measurement and report the measurement results to the mayor or the provincial governor, the head of the

basin environmental office, and the head of the regional environmental office by the 10th of the following month and keep the relevant records until the follow-up management is completed.

▶ **Related regulations**

- Article 31 (2) of the Wastes Control Act
- Article 13 of the Enforcement Decree of the Wastes Control Act
- Article 43 (2), (3) and Attached Table No. 12 of the Enforcement Rules of the Wastes Control Act

▶ **Pollutants subject to measurement and measurement cycles**

Quantity	Measurement cycle	Pollutants subject to measurement
If the quantity of discharged leachate is 2,000 m <sup>3</sup> or more per day	<ul style="list-style-type: none"> <li>• Chemical BOD: At least once a day</li> <li>• Other pollutants: At least once a week</li> </ul>	Items subject to the standards for permission of discharge according to Subparagraph 2, Item b-2-a of Attached Table No. 11 of the Enforcement Rules of the Wastes Control Act
If the quantity of discharged leachate is less than 2,000 m <sup>3</sup> per day	At least once a month	

**<Note> Organizations for measurement of pollutants of waste treatment facility (landfill facility)**

▶ **Related regulations** Article 31 (2) of the Wastes Control Act and Article 43 (1) of its Enforcement Rules

▶ **Measurement organizations**

Public Health and Environment Research Institute, Korea Environment Corporation, business operators registered for agency work for the measurement of water pollutants, SUDOKWON Landfill Site Management Corporation, professional institutes specializing in waste analysis

**E. Appointment of technical manager**

- When installing and operating a waste treatment facility larger than a certain size, it is necessary to appoint a technical manager or conclude an agency

## 11 Installation and operation of waste treatment facility

contract with a technical management agent with technical management capability for the performance of technical works for the maintenance and management of the facility concerned.

- ▶ **Related regulations** Article 34 (1) of the Wastes Control Act, Article 15 of its Enforcement Decree, and Article 48 and Attached Table No. 14 of its Enforcement Rules

### ▶ Waste treatment facilities requiring a technical manager

Facility	Size of facility
Landfill facility	<ul style="list-style-type: none"> <li>• (Designated waste) A facility with landfill area of 3,300 m<sup>2</sup> or more. In the case of a blocking-type landfill facility, however, a facility with landfill area of 330 m<sup>2</sup> or more or landfill capacity of 1,000 m<sup>3</sup> or more</li> <li>• (Other wastes) A facility with landfill area of 10,000 m<sup>2</sup> or more or landfill capacity of 30,000 m<sup>3</sup> or more</li> </ul>
Incineration facility	<ul style="list-style-type: none"> <li>• A facility with hourly disposal capacity of 600 kg or more (200 kg for medical wastes)</li> </ul>
Pressing, smashing, crushing, or cutting facility	<ul style="list-style-type: none"> <li>• A facility with daily disposal capacity or recycling capacity of 100 tons or more</li> </ul>
Facility making feed, compost, or fuel with wastes	<ul style="list-style-type: none"> <li>• A facility with daily recycling capacity of 5 tons or more</li> </ul>
Sterilization crushing facility	<ul style="list-style-type: none"> <li>• A facility with hourly disposal capacity of 100 kg or more</li> </ul>
Cement roaster furnace	—
Smelting furnace <sup>46)</sup>	<ul style="list-style-type: none"> <li>• A facility with hourly recycling capacity of 600 kg or more</li> </ul>
Incineration heat recovery facility	<ul style="list-style-type: none"> <li>• A facility with hourly recycling capacity of 600 kg or more</li> </ul>

46) Limited to the extraction of nonferrous metal from waste

▶ **Standards for qualification of technical manager**

Facility	Size of facility
Landfill facility	<ul style="list-style-type: none"> <li>One or more of waste treatment engineer, water environment engineer, civil engineer, general mechanical engineer, construction equipment engineer, chemical engineer, and soil environment engineer</li> </ul>
Incineration facility (except medical wastes) cement roaster furnace, smelting furnace, incineration heat recovery facility	<ul style="list-style-type: none"> <li>One or more of waste treatment engineer, air environment engineer, electricity engineer, and electrical construction engineer</li> </ul>
Facility treating medical wastes	<ul style="list-style-type: none"> <li>One or more of industrial waste treatment engineer, medical laboratory technician, and hygienist</li> </ul>
Facility treating foodstuff wastes	<ul style="list-style-type: none"> <li>One or more of industrial waste treatment engineer, industrial water environment engineer, industrial chemical engineer, industrial civil engineer, industrial air environment engineer, general mechanical engineer, and electricity engineer</li> </ul>
Other facilities	<ul style="list-style-type: none"> <li>At least one person in charge of operation of the facility</li> </ul>

**Note** If the waste treatment facility concerned is an air pollutant discharge facility, a wastewater discharge facility, or a noise and vibration emission facility, the environment manager according to the related law can also be the technical manager.

<Note> **Technical management agent**

▶ **Related regulations** Article 34 (1) of the Wastes Control Act and Article 16 of its Enforcement Decree

▶ **Technical management agent**

Korea Environment Corporation, engineering business operator, professional engineer's office (limited to the office opened by a professional engineer who has a certificate of technical manager), others recognized and publicly announced by the Minister of Environment to be able to conduct agency work for technical management



## Installation and operation of waste treatment facility

### F. Other matters to be observed

- A person who is in charge of waste treatment, including the technical manager of a waste treatment facility, shall receive training conducted by a related education institute once every three years.

#### ▶ Related regulations

- Article 35 (1) 1 (b), (c) of the Wastes Control Act and Article 17, Subparagraph 1 of its Enforcement Decree
- Article 50 (1) and Article 50 (2) 1 (a), (b), Article 50 (2) 2 (c) of the Enforcement Rules of the Wastes Control Act

#### ▶ Education institutes for different types of persons in charge of waste treatment

Person	Education institute
The technical manager of the waste treatment facility or a person who installed the facility and who conducts technical management by himself/herself	• National Institute of Environmental Human Resources Development, Korea Environment Corporation, or Korea Waste Association
A person who installs and operates the waste treatment facility <sup>47)</sup> or an employee of the person in charge of technical management	• National Institute of Environmental Human Resources Development, Korea Environment Corporation, or Korea Waste Association
A person who installs and operates the waste treatment facility <sup>48)</sup> or an employee of the person in charge of technical management	• Korea Environment Preservation Association or Korea Waste Association

- When installing and operating a waste treatment facility, it is necessary to record the status of generation, discharge, and treatment of wastes and keep the relevant records for three years from the date of last recording.

47) Applicable to a waste treatment facility whose installation is approved according to Article 29 of the Wastes Control Act; a waste treatment facility required to have a technical manager shall be excluded.

48) Applicable to a waste treatment facility whose installation is approved according to Article 29 of the Wastes Control Act; a waste treatment facility required to have a technical manager shall be excluded.

**▶ Related regulations**

- Article 36 (1) 5 of the Wastes Control Act
- Article 58 (1) 4 of the Enforcement Rules of the Wastes Control Act

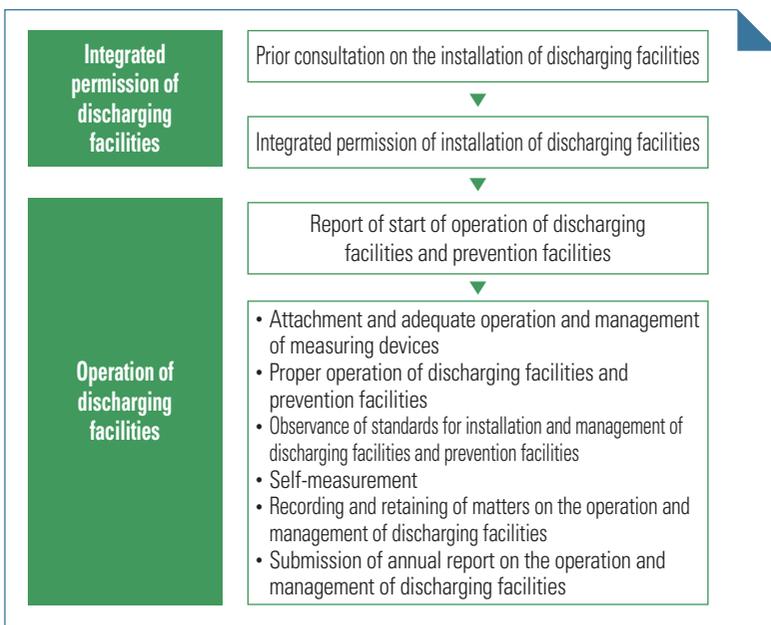
**▶ Ledger for recording matters related to the installation and operation of waste treatment facility**

- Ledger for operation and management of interim waste disposal facility: Attached Form No. 40 of the Enforcement Rules of the Wastes Control Act
- Ledger for operation and management of final waste disposal facility: Attached Form No. 43 of the Enforcement Rules of the Wastes Control Act
- Ledger for operation and management of waste recycling facility: Attached Form No. 44-2 of the Enforcement Rules of the Wastes Control Act

# 12 Integrated permission and operation of discharging facilities

## 01 Summary

- A business operator of an object of integrated permission of discharging facilities may request prior consultation to the Minister of Environment before applying for integrated permission, etc.
- A business operator subject to integrated permission of discharging facilities shall obtain permission from the Minister of Environment in order to install and operate the facilities.
- For the operation of discharging facilities and prevention facilities, it is necessary to report the start of operation to the Minister of Environment in advance.
- It is also necessary to operate the discharging facilities and prevention facilities adequately as well as attach measuring devices and operate and manage them properly.
- In addition, it is necessary to observe the standards for installation and management of discharging facilities and prevention facilities and measure the pollutants, etc. emitted from the discharging facilities.



## 02 Terminology

Term	Definition
Pollutants, etc.	<p>The following substances, etc. that cause environmental pollution (Article 2, Subparagraph 1 of the Act on the Integrated Control of Pollutant-discharging Facilities):</p> <ul style="list-style-type: none"> <li>• Air pollutants defined in Article 2, Subparagraph 1 of the Clean Air Conservation Act</li> <li>• Volatile organic compounds defined in Article 2, Subparagraph 10 of the Clean Air Conservation Act</li> <li>• Fugitive dust defined in Article 43 (1) of the Clean Air Conservation Act</li> <li>• Noise and vibration defined in Article 2, Subparagraph 1, 2 of the Noise and Vibration Control Act</li> <li>• Water pollutants defined in Article 2, Subparagraph 7 of the Water Environment Conservation Act</li> <li>• Malodor defined in Article 2, Subparagraph 1 of the Malodor Prevention Act</li> <li>• Persistent organic pollutants defined in Article 2, Subparagraph 1 of the Persistent Organic Pollutants Control Act</li> <li>• Soil contaminants defined in Article 2, Subparagraph 2 of the Soil Environment Conservation Act</li> <li>• Wastes defined in Article 2, Subparagraph 1 of the Wastes Control Act</li> </ul>
Discharging facilities	<p>The following facilities, machines, and systems that discharge pollutants, etc. (Article 2, Subparagraph 2 of the Act on the Integrated Control of Pollutant-discharging Facilities):</p> <ul style="list-style-type: none"> <li>• Facilities discharging volatile organic compounds as defined in Article 2, Subparagraph 10 of the Clean Air Conservation Act</li> <li>• Facilities emitting air pollutants as defined in Article 2, Subparagraph 11 of the Clean Air Conservation Act</li> <li>• Facilities emitting fugitive air pollutants as defined in Article 38-2 (1) of the Clean Air Conservation Act</li> <li>• Businesses that produce fugitive dust as defined in Article 43 (1) of the Clean Air Conservation Act</li> <li>• Facilities producing noise or vibration as defined in Article 2, Subparagraph 3 of the Noise and Vibration Control Act</li> <li>• Non-point pollution sources defined in Article 2, Subparagraph 2 of the Water Environment Conservation Act</li> <li>• Facilities discharging wastewater as defined in Article 2, Subparagraph 10 of the Water Environment Conservation Act</li> <li>• Facilities emitting malodor as defined in Article 2, Subparagraph 3 of the Malodor Prevention Act</li> </ul>

## 12 Integrated permission and operation of discharging facilities

Term	Definition
Discharging facilities	<ul style="list-style-type: none"> <li>Discharging facilities defined in Article 2, Subparagraph 2 of the Persistent Organic Pollutants Control Act</li> <li>Specified facilities subject to the control of soil contamination as defined in Article 2, Subparagraph 4 of the Soil Environment Conservation Act</li> <li>Facilities specified by the Ordinance of the Ministry of Environment among the waste disposal facilities defined in Article 2, Subparagraph 8 of the Wastes Control Act (Article 2 (1) and Attached Table No. 1 of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities)</li> </ul>
Prevention facilities	The prevention facilities specified by the Ordinance of the Ministry of Environment as those that eliminate or reduce pollutants, etc. from discharging facilities (Article 2, Subparagraph 3 of the Act on the Integrated Control of Pollutant-discharging Facilities and Article 2 (2) and Attached Table No. 2 of its Enforcement Rules)

### <Note> A place of business that is subject to integrated permission of discharging facilities and application time

▶ **Related regulations** Article 6 (1) of the Act on the Integrated Control of Pollutant-discharging Facilities, Article 2 (1) and Attached Table 1 of its Enforcement Decree; and Article 4 (1), (2), (3) of its Enforcement Rules

▶ **Applicable workplace**

One of the following places of business among those that belong to an industry type wielding great influence on the environment:

- A place of business generating 20 tons or more of air pollutants (dust, nitrogen oxides, and sulfur oxides)
- A place of business discharging 700 m<sup>3</sup> or more of wastewater a day

▶ **Application time** Gradual application to different industry types for 5 years from 2017 (4 years from the application time for existing places of business)

No.	Industry type	Applicable from
1	Electricity business <ul style="list-style-type: none"> <li>Thermal power generation business</li> <li>Other power generation businesses</li> </ul>	Jan. 1, 2017
2	Steam, hot and cold water, and air conditioning supply business	

No.	Industry type		Applicable from
3	Waste treatment business <sup>49)</sup>	<ul style="list-style-type: none"> <li>• Non-designated waste treatment business</li> <li>• Designated waste treatment business</li> </ul>	Jan. 1, 2017
4	Basic chemical substances manufacturing business	Business manufacturing the basic chemical substances of petrochemicals	Jan. 1, 2018
5	Synthetic rubber and plastic material manufacturing business	<ul style="list-style-type: none"> <li>• Synthetic rubber manufacturing business</li> <li>• Synthetic resin and other plastic materials manufacturing business</li> </ul>	
6	Primary steel manufacturing business		
7	Primary nonferrous metals manufacturing business		
8	Petroleum refined products manufacturing business		Jan. 1, 2019
9	Basic chemical substances manufacturing business	<ul style="list-style-type: none"> <li>• Other basic inorganic chemical substances manufacturing business</li> <li>• Inorganic pigment and other metallic oxides manufacturing business</li> </ul>	
10	Basic chemical substances manufacturing business	<ul style="list-style-type: none"> <li>• Other basic organic chemical substances manufacturing business</li> <li>• Synthetic dye, conditioner, and other coloring agents manufacturing business</li> </ul>	

49) Excluding a place of business belonging to a waste treatment business only and where a landfill facility is installed according to Subparagraph 2 (a) of Attached Table No. 3 of the Enforcement Decree of the Wastes Control Act

## 12 Integrated permission and operation of discharging facilities

No.	Industry type	Applicable from
11	Other chemical products manufacturing business <ul style="list-style-type: none"> <li>• Pesticide manufacturing business</li> <li>• General paints and related products manufacturing business</li> <li>• Glaze for ceramics and related products manufacturing business</li> <li>• Surfactant manufacturing business</li> <li>• Toothpaste, soap, and other detergent manufacturing business</li> <li>• Cosmetics manufacturing business</li> <li>• Processed and refined salt manufacturing business</li> <li>• Adhesive and gelatin manufacturing business</li> <li>• Gunpower and flame products manufacturing business</li> <li>• Other unclassified chemical products manufacturing business</li> </ul>	Jan. 1, 2019
12	Fertilizer and nitrogen oxides manufacturing business	
13	Pulp, paper, and cardboard manufacturing business <ul style="list-style-type: none"> <li>• Pulp manufacturing business</li> <li>• Newsprint paper manufacturing business</li> <li>• Business of manufacturing stencil paper for printing and writing</li> <li>• Kraft paper and box cardboard manufacturing business</li> <li>• Other paper and cardboard manufacturing business</li> </ul>	Jan. 1, 2020
14	Other paper and cardboard products manufacturing business	
15	Electronic components manufacturing business <ul style="list-style-type: none"> <li>• Flat panel display manufacturing business</li> <li>• Printed circuit board manufacturing business</li> <li>• Electronic battery manufacturing business</li> <li>• Other electronic components manufacturing business</li> </ul>	

No.	Industry type	Applicable from
16	Butchery, meat processing, and storage business	Jan. 1, 2021
17	Alcoholic beverages manufacturing business	
18	Textile products dyeing, arranging, and finish processing business	
19	Plastic products manufacturing business	
20	Semiconductor manufacturing business	
21	Automobile parts manufacturing business	

- 1) Applicable to a place of business engaging in two or more industry types, one of which belongs to any of the industry types above
- 2) For a workplace engaging in two or more industry types as objects of integrated management, the latest application time among the industry types shall be applied.

## 03 Integrated permission of discharging facilities

### A. Prior consultation on discharging facilities

- A business operator who is intending to apply for integrated permission or change of permission for the installation and operation of discharging facilities at a place of business subject to integrated permission may request prior consultation to the Minister of Environment.
- If an applicant who is notified of the results of prior consultation wishes to obtain integrated permission or change of permission for discharging facilities by reflecting the results, it is necessary to apply for permission to the Minister of Environment within one year<sup>50)</sup> of the date of receipt of the results of prior consultation.

50) If it is deemed impossible to apply for integrated permission for discharging facilities within one year of the date of receipt of the consultation results due to inevitable reasons such as the long time taken for the measures necessary for the reflection of the results of the prior consultation, the Minister of Environment may extend the deadline for the application for permission by up to one year (Article 3 (5) of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities).

## 12 Integrated permission and operation of discharging facilities

▶ **Related regulations** Article 5 (1), (3) of the Act on the Integrated Control of Pollutant-discharging Facilities and Article 3 (1), (2), (4) of its Enforcement Rules

▶ **Matters of prior consultation**

- Matters related to the plan to install discharging facilities and prevention facilities
- Matters related to the establishment of standards for permission of discharge
- Matters related to the plan to operate discharging facilities and prevention facilities
- Matters related to the analysis of impact of discharge

▶ **Required documents**

- Application form for prior consultation (Attached Form No. 1 of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities)
- Plan for the matters in the application

### <Note> Standards for permission of discharge

▶ **Related regulations** Article 8 (1) of the Act on the Integrated Control of Pollutant-discharging Facilities

▶ **Related information** When the permission or change of permission is to be granted according to Article 6 of the Act on the Integrated Control of Pollutant-discharging Facilities, the Minister of Environment shall set the standards for permission of discharge below the standards for maximum discharge.<sup>51)</sup>

### <Note> Discharge impact analysis

▶ **Related regulations** Article 6 (4) 2 of the Act on the Integrated Control of Pollutant-discharging Facilities

▶ **Related information** Referring to the influence on the neighboring environment

51) The maximum discharge of pollutants if the best available technology is applied to discharging facilities: The Minister of Environment decides the standards for maximum discharge for each industry type by consulting with the head of the related central administrative agency as per the ordinance of the Ministry of Environment. (Article 24 (4) of the Act on the Integrated Control of Pollutant-discharging Facilities and Article 26 (2) and Attached Table No. 15 of its Enforcement Rules)

affected by the pollutants discharged from the discharging facilities as investigated and analyzed by the ordinance of the Ministry of Environment<sup>52)</sup>

## B. Integrated permission of discharging facilities

- It is necessary to obtain integrated permission in order to install and operate discharging facilities at a place of business subject to the integrated permission of discharging facilities.
- The required documents shall be submitted to the Minister of Environment for the integrated permission of discharging facilities.

### ▶ Related regulations

- Article 6 (1), (4) of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 6 (1) of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities

### ▶ Required documents

- Application form for permission of installation and operation of discharging facilities (Attached Form No. 3 of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities)
- Integrated environment management plan
  - Installation and operation plan for discharging facilities and prevention facilities
  - Results of analysis of impact of discharge
  - Ex post monitoring, maintenance and management plan
  - Measures for the prevention of environmental pollution accidents and follow-up measures
  - Reflection of the results of prior consultation (if the applicant applies for permission by reflecting the results of prior consultation after receiving notification on the results of prior consultation)
  - General conditions of the workplace
  - Standards for permission of discharge for each outlet
  - Material used including raw materials and fuel

52) Article 6 (4) and Attached Table No. 4 of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities

## 12 Installation and operation of discharging facilities

- Details of application of the best available technology
- Documents to be submitted pursuant to another law when application or report is made for permission or approval of installation of discharging facilities

### <Note> Best available technology and standards thereof

#### ▶ Best available technology

Refers to the environmental management technology for the design, installation, operation, and management of discharging facilities and prevention facilities, composed of technologically and economically applicable management skills for the efficient reduction of discharge of pollutants; to be prepared by the Minister of Environment considering the applicability to the workplace, effect on reducing pollutants, required costs, etc. (Article 24 (1) of the Act on the Integrated Control of Pollutant-discharging Facilities)

#### ▶ Standards for best available technology

The Minister of Environment shall prepare and distribute the standards for best available technology for its easy application to the workplace. (Article 24 (2) of the Act on the Integrated Control of Pollutant-discharging Facilities)

### C. Permission and report of change of discharging facilities

- A person who is intending to change important matters of discharging facilities that received integrated permission shall receive permission for change. It is necessary to make a report of change if any matters besides those permitted for change are going to be changed.

#### ▶ Required documents

- Article 6 (2) of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 2 (2) and Attached Table No. 2, Article 3 and Attached Table No. 3 of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 5 and Article 6 (2), (3) of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities

► **Changes subject to permission and report**

	<b>Changes subject to permission and report</b>	<b>When to apply (report)</b>
<b>Permission</b>	<ul style="list-style-type: none"> <li>• Increase in the quantity of annual generation of air pollutants or daily wastewater discharge by more than a certain size</li> <li>• Generation of a new pollutant besides the pollutants for which standards for permission of discharge are set</li> <li>• Need to change the standards for permission of discharge or the conditions for permission according to the new or additional installation of discharging facilities</li> <li>• If transferred to an area where the air environment and discharge of volatile organic compounds are regulated</li> </ul> <p><b>&lt;Note&gt;</b> For more details on the changes subject to permission, refer to Attached Table No. 2 of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities.</p>	<p>Regarding the application time for each object of permission of change, refer to Article 6 (2) of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities.</p>
<b>Report</b>	<ul style="list-style-type: none"> <li>• Extension, replacement, closure, or change of discharging facilities</li> <li>• Extension, replacement, closure, or change of prevention facilities</li> <li>• Change of raw materials, fuel, etc. used at the discharging facilities or change of their operation conditions</li> <li>• Change of permitted or reported matters including the name of the workplace or its representative</li> </ul> <p><b>&lt;Note&gt;</b> • For more details on the changes subject to reporting, refer to Attached Table No. 3 of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities.</p>	<p>Regarding the application time for each change subject to permission, refer to Article 6 (3) of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities.</p>

## 12 Integrated permission and operation of discharging facilities

### ▶ Required documents

- Application for change of permission or report of discharging facilities (Attached Form No. 4 of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities)
- Integrated environment management plan reflecting the changed matters

### <Note> Review and change of standards for conditions for permission of discharging facilities and standards for permissible discharge<sup>53)</sup>

- In cases specified by Article 4 (1) of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities as deemed necessary to review and amend the conditions for permission or permissible discharge standards at an interval of five years after issuing permits or revised permits, the Minister of Environment may amend the conditions for permission or permissible discharge standards after hearing the opinions of business operators (Article 9 (1) of the Act on the Integrated Control of Pollutant-discharging Facilities).

## 04 Operation of discharging facilities

### A. Report of start of operation of discharging facilities

- In order to operate the discharging facilities and prevention facilities in whole or in part following their installation or change, it is necessary to submit the required documents to the Minister of Environment.

### ▶ Related regulations

- Article 12 (1) of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 5 (1) of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities

53) When issuing a permit or a revised permit, the Minister of Environment may attach the conditions thereto as necessary for minimizing the impact on people's health or environment (Article 6 (3) of the Act on the Integrated Control of Pollutant-discharging Facilities)

- Article 10 (1) of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities

► **Cases where report of start of operation is required after reporting a change of discharging facilities**

- Increase of 20 percent or more in the size of the discharging facility specified in Subparagraph 3, Item a-3 of Attached Table No. 3 of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities
- A case specified in Subparagraph 1, Item a-7 of Attached Table No. 3 of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities
- A case specified in Subparagraph 1, Item a-14 of Attached Table No. 3 of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities
- Change of wastewater treatment method of the water pollution prevention facility specified in Subparagraph 1, Item b-5 of Attached Table No. 3 of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities
- New installation of prevention facility at a discharging facility exempted from the obligation of installation of prevention facility specified in Subparagraph 1, Item b-8 of Attached Table No. 3 of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities

► **Required documents**

- Report of start of operation of discharging facilities and prevention facility (Attached Form No. 7 of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities)
- Original result of review of permission (change of permission) of installation and operation of discharging facilities
- Inspection report on the waste treatment facility subject to inspection according to Article 30 (1) of the Wastes Control Act

- Among the facilities whose start of operation is reported, the nitrogen reduction facility, water pollution prevention facility, etc. of power plants can perform test operation for a certain period.

- **Related regulations** Article 12 (3) of the Act on the Integrated Control of Pollutant-discharging Facilities, Article 5 (2) of its Enforcement Decree, and Article 10 (4) of its Enforcement Rules

## 12 Integrated permission and operation of discharging facilities

### ► Period of test operation for each facility

- Air pollution prevention facilities (sulfur oxide reduction facility, nitrogen oxide reduction facility) and air pollutant-discharging facilities equipped with prevention facility: 30 days from the date of start of operation
- Water pollution prevention facilities and wastewater discharging facilities equipped with prevention facilities
  - Biochemical treatment method: 50 days from the date of start of operation (70 days from the date of start of operation if the date of start of operation is between November 1 and January 1 of the following year)
  - Physical or chemical treatment method: 30 days from the date of start of operation
- Noise and vibration prevention facilities and noise and vibration emission facilities equipped with prevention facilities: 30 days from the date of start of operation
- Discharging facilities specified in Article 16, Subparagraph 3 of the Enforcement Decree of the Clean Air Conservation Act: 30 days from the date of start of operation

### B. Attachment and adequate operation and management of measuring devices

- Measuring devices shall be attached for confirmation of the level of pollutants discharged from discharging facilities or amount of water, electricity, etc. used in discharging facilities and prevention facilities.

### ► Related regulations

- Article 19 (1) of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 18 (1) of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities

### ► Type of measuring devices

Device	Type
Air pollutants measuring device	<ul style="list-style-type: none"> <li>• Watt-hour meter</li> <li>• Smokestack tele-monitoring system</li> </ul>
Water pollutants measuring device	<ul style="list-style-type: none"> <li>• Watt-hour meter</li> <li>• Integrating flow meter for the measurement of used water and wastewater</li> <li>• Automatic water quality measuring device (including auxiliary devices such as automatic sample collector and material collector)</li> </ul>

► **Where, how and when to attach measuring device, and what to measure and how**

- Refer to Article 18 (2) and Attached Table No. 12 of the Enforcement Decree of the Act on the Integrated Control of Pollutant-discharging Facilities

- In addition, it is necessary to operate and manage measuring devices adequately by observing the standards for operation and management of measuring devices.

► **Prohibited conducts by business operators attaching measuring devices**

- Article 20 (1) of the Act on the Integrated Control of Pollutant-discharging Facilities
  - Not operating a measuring device intentionally or not conducting normal measurement
  - Neglecting a measuring device that is not operating normally due to corrosion, abrasion, failure, or damage without justifiable reason
  - Damaging a measuring device intentionally
  - Omitting the results of measurement or falsifying the results of measurement by manipulating the measuring device

► **Standards for operation and management of measuring devices**

- Article 20 (2) of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 19 and Attached Table No. 10 of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities

## C. Proper operation of discharging facilities and prevention facilities

- Prohibited conducts when operating air pollutant-discharging facilities or wastewater-discharging facilities and attached prevention facilities

► **Prohibited acts when operating air pollutant-discharging facilities or wastewater-discharging facilities and attached prevention facilities**

- Prohibited conducts when operating air pollutant-discharging facilities and attached prevention facilities: Article 21 (1) 1 of the Act on the Integrated Control of Pollutant-discharging Facilities
- Prohibited conducts when operating wastewater-discharging facilities and attached prevention facilities: Article 21 (1) 2 of the Act on the Integrated Control of Pollutant-discharging Facilities

## 12 Integrated permission and operation of discharging facilities

- Prohibition of other conducts discharging pollutants beyond the permissible standards by not operating air pollutant-discharging facilities or wastewater-discharging facilities and attached prevention facilities normally without justifiable reason: Article 21 (1) 3 of the Act on the Integrated Control of Pollutant-discharging Facilities

### D. Compliance with standards for the installation and management of discharging facilities and prevention facilities

- It is necessary to observe the standards for installation and management of discharging facilities and prevention facilities and the standards for measurement and inspection of pollutants in order to reduce the pollutants discharged from discharging facilities, etc.

#### ▶ Standards for installation and management of discharging facilities and prevention facilities

- Article 21 (2) of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 23 and Attached Table No. 12 of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities

#### ▶ Standards for measurement and inspection of pollutants

- Article 21 (2) of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 23 and Attached Table No. 13 of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities

### E. Self-measurement

- For the adequate operation of discharging facilities and prevention facilities, it is necessary to conduct self-measurement of pollutants or entrust a measurement agency with the measuring work and register the results of measurement in the integrated environmental permission system<sup>54</sup>). The sample collection records and filter paper used for self-measurement shall be retained for six months from the date of measurement.

54) Minister of Environment establishes and operates the integrated environmental permission system to process permission or changes in permission electronically (Article 28 (1) of the Act on the Integrated Control of Pollutant-discharging Facilities).

► **Related regulations**

- Article 31 (1) of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 32 (4) and Attached Table No. 16 and Article 33 of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities

► **Minimum number of self-measurements for each pollutant**

- It is necessary to take measurements for more than a certain number of times of measurement for each pollutant considering the harmfulness of the measured pollutant, level of discharge concentration, etc. Integrated Control of Pollutant-discharging Facilities

Air pollutants			Water pollutants		
Discharge		Measurements	Discharge		Measurements
Total quantity of dust, sulfur oxides, and nitrogen oxides generated	80 tons a year or more	Quarterly	Quantity of wastewater discharged	2,000 m <sup>3</sup> or more a day	Quarterly
	20 tons a year or more	Quarterly		700 m <sup>3</sup> or more a day	Quarterly
	10 tons a year or more	Semiannually		200 m <sup>3</sup> or more a day	Semiannually
	2 tons a year or more	Yearly		50 m <sup>3</sup> or more a day	Yearly
	Less than 2 tons a year	Yearly		Less than 50 m <sup>3</sup> a day	Yearly

► **Items subject to self-measurement and items exempted from self-measurement**

- Article 31 (2) of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 32 (1), (2) of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities

**F. Other matters to be observed**

- It is necessary to retain records on the operation and management of discharging facilities and prevention facilities.

## 12 Integrated permission and operation of discharging facilities

### ▶ Related regulations

- Article 32 of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 34 (1), (2) of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities

### ▶ Matters to be recorded and retained

- Matters on the operation, management, etc. of discharging facilities and prevention facilities
- Matters on the fulfillment of conditions for permission

### ▶ Recording and retention method

- Enter the operation time and quantity of fuel, raw materials, auxiliary materials, and water used in the integrated environmental permission system on a regular basis.
- The scope of materials subject to recording and retention, method and cycle of input, and matters on the retention of input data shall be decided and publicly announced by the president of the National Institute of Environmental Research.<sup>55)</sup>

- In addition, it is necessary to prepare an annual report on the operation and management of discharging facilities and prevention facilities during the year by the end of April of the following year and submit it through the integrated environmental permission system.

### ▶ Related regulations

- Article 33 (1), (2) of the Act on the Integrated Control of Pollutant-discharging Facilities
- Article 35 (1), (2) of the Enforcement Rules of the Act on the Integrated Control of Pollutant-discharging Facilities

### ▶ Matters to be recorded and retained

- Matters on the conditions for permission and compliance with the standards for permissible discharge
- Matters on the installation and operation of discharging facilities and prevention facility
- Matters on ex post monitoring, maintenance, and management
- Matters on the prevention of environmental pollution accidents and follow-up measures

55) Public notice on the retention of electronic records on the operation and management of discharging facilities and prevention facilities and fulfillment of conditions for permission (National Institute of Environmental Research Public Notice No. 2017-44)

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## II.

# Companies Manufacturing (Importing) or Handling Chemical Substances

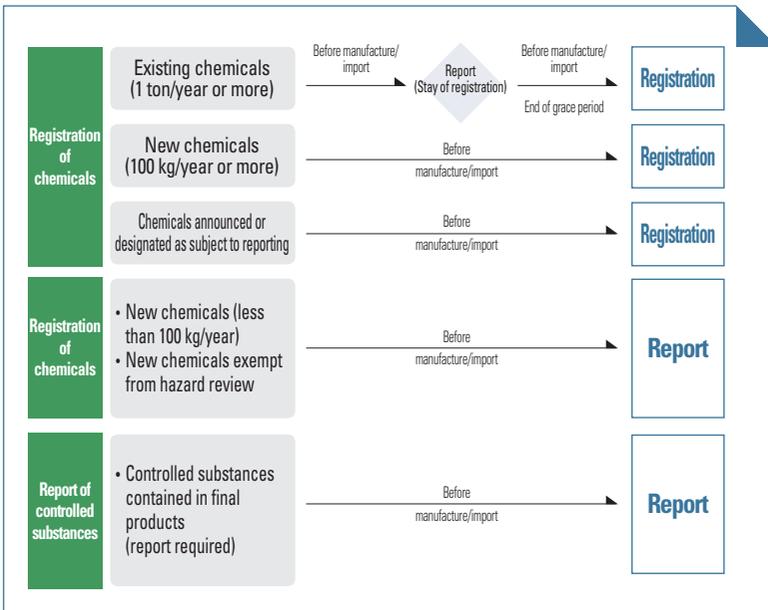
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# 01 Registration and reporting of chemical substances

## 01 Summary

- Companies intending to manufacture or import 100 kg or more of new chemicals or 1 ton or more of existing chemicals shall register such activities with the president of the National Institute of Environmental Research. Such registration may not be required during the grace period if the activity involves manufacturing/importing 1 ton or more of existing chemicals; in order to qualify for the grace period, the company shall report the activity to the CEO of Korea Environmental Corporation.
- Companies intending to manufacture/import new chemicals requiring reporting shall make the report to the president of the National Institute of Environmental Research.
- Companies intending to manufacture/import any controlled substances used for final products, if the substances require reporting, shall report such activities to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office.



## 02 Terminology

Term	Definition
Chemical	Any of the products obtained by chemically modifying, extracting, or purifying naturally existing substances and those obtained by causing artificial reaction to elements and compounds (Article 2, Subparagraph 1 of the Act on the Registration, Evaluation, etc. of Chemicals)
Mixture	Any of the products consisting of two or more substances or solution containing them (Article 2, Subparagraph 2 of the Act on the Registration, Evaluation, etc. of Chemicals)
Existing chemicals	The following chemicals (Article 2, Subparagraph 3 of the Act on the Registration, Evaluation, etc. of Chemicals) <ul style="list-style-type: none"> <li>Chemicals commercially distributed locally prior to Feb. 2, 1991 as announced by the Minister of Environment following a discussion with the Minister of Employment and Labor</li> <li>Chemicals screened for hazard as per the previous Hazardous Chemicals Control Act on or after Feb. 2, 1991 and announced by the Minister of Environment</li> </ul>
New chemicals	All chemicals except existing ones (Article 2, Subparagraph 4 of the Act on the Registration, Evaluation, etc. of Chemicals)
Controlled substance	Any of the chemicals corresponding to one of the following and which are announced by the Minister of Environment based on the concern of risk after screening by the Chemicals Review Committee (Article 2, Subparagraph 10-2 of the Act on the Registration, Evaluation, etc. of Chemicals) <ul style="list-style-type: none"> <li>Substances with concerns of causing cancer, mutation, abnormal reproductive capacity, or endocrine disorder to humans or animals</li> <li>Substances highly likely to be accumulated in the body of humans or animals/plants and long-term residues in the environment</li> <li>Substances likely to damage the organs such as lungs, liver, or kidneys in case humans are exposed to them</li> <li>Substances capable of causing damage equivalent to or worse than the foregoing to humans or animals/plants</li> </ul>
Hazard	Human health or environment, such as toxicity (Article 2, Subparagraph 11 of the Act on the Registration, Evaluation, etc. of Chemicals)
Risk	Degree of damage to humans or environment in case of exposure to harmful chemicals (Article 2, Subparagraph 12 of the Act on the Registration, Evaluation, etc. of Chemicals)



## Registration and reporting of chemical substances

### ▶ Attention Applicable scope of the Act on the Registration, Evaluation, etc. of Chemicals

#### ▶ Related regulations

○ Article 3 of the Act on the Registration, Evaluation, etc. of Chemicals

Article 3 (Applicability) The Act shall not apply to chemicals corresponding to any of the following:

1. Radioactive materials as per Article 2, Subparagraph 5 of the Nuclear Safety Act
2. Medications and quasi-drugs as per Article 2, Subparagraph 4, 7 of the Pharmaceutical Affairs Act
3. Narcotics as per Article 2, Subparagraph 1 of the Narcotics Control Act
4. Cosmetics and their raw materials as per Article 2, Subparagraph 1 of the Cosmetics Act
5. Pesticides and their raw materials as per Article 2, Subparagraph 1, 3 of the Pesticides Control Act
6. Fertilizers as per Article 2, Subparagraph 1 of the Fertilizer Control Act
7. Foods, food additives, utensils, containers, and packaging as per Article 2, Subparagraph 1, 2, 4, 5 of the Food Sanitation Act
8. Livestock and fish feed as per Article 2, Subparagraph 1 of the Control of Livestock and Fish Feed Act
9. Explosives as per Article 2 (3) of the Act on the Safety Management of Guns, Swords, Explosives, etc.
10. Military supplies as per Article 2 of the Act on the Management of Military Supplies and Article 3 (2) of the Defense Acquisition Program Act (Routine items as per Article 3 of the Defense Acquisition Program Act are excluded.)
11. Health functional foods as per Article 3, Subparagraph 1 of the Health Functional Foods Act
12. Medical devices as per Article 2 (1) of the Medical Devices Act
13. Hygiene products as per Article 2, Subparagraph 1 of the Hygiene Products Control Act
14. Biocidal substances and products as per Article 3, Subparagraph 7, 8 of the Safety Control Act of Household Chemicals and Biocidal Products

#### <Note> Chemical information system and chemical information processing system

##### ▶ Chemical information system

A system providing information on the hazardousness of chemical substances, hazardous substances, etc. Information can be searched by entering the name of the chemical substance, CAS number, or name of hazardous substance.

**▶ Chemical information processing system**

A system that electronically processes legal obligations such as registration or report of chemical substances (Article 39 of the Act on the Registration, Evaluation, etc. of Chemicals)

- Tasks that can be processed by the chemical information processing system (Article 22 of the Enforcement Decree of the Act on the Registration, Evaluation, etc. of Chemicals)
  - Tasks regarding reporting, registration, etc. of chemicals or changes of such information
  - Tasks regarding exemption from reporting and registration of chemicals
  - Tasks regarding changes of registration or report
  - Tasks regarding the provision of information on chemicals
  - Tasks regarding notifications, etc. for the provision of information on chemicals
  - Tasks regarding products containing controlled substances
  - Tasks regarding registration application filed by the representative of a foreign manufacturer
  - Tasks regarding the disclosure of information on chemicals
  - Tasks regarding the protection of information

**03 Registration of chemicals****A. Registration of chemicals****① Existing chemicals**

- Companies intending to manufacture/import 1 ton or more of existing chemicals per year shall register such activities with the president of the National Institute of Environmental Research.

Such registration may not be required during the grace period; in order to qualify for the grace period, the company shall report the activity to the CEO of Korea Environmental Corporation prior to starting the activity, including changes, if any.

**▶ Related regulations on registration, grace period, reporting, etc.**

- Article 10 (1), (2), (3) of the Act on the Registration, Evaluation, etc. of Chemicals



## Registration and reporting of chemical substances

- Article 10 and Article 10-2 of the Enforcement Decree of the Act on the Registration, Evaluation, etc. of Chemicals
- Article 5 (1), Article 6-2 (1), (2), (4) of the Act on the Registration, Evaluation, etc. of Chemicals

Category	End of grace period
1 ton or more of CMR substance <sup>56)</sup> or 1,000 tons or more of manufactured/imported substance per year	December 31, 2021
100 tons or more of manufactured/imported substance per year	December 31, 2024
10 tons or more of manufactured/imported substance per year	December 31, 2027
1 ton or more of manufactured/imported substance per year	December 31, 2030

### ▶ Information to be reported or changes of grace period and required documents

Classification	Details
Information to be reported	<ul style="list-style-type: none"> <li>• Name of chemicals</li> <li>• Quantity of manufacturing or importing per year</li> <li>• Category/Marking of chemicals</li> <li>• Purpose</li> <li>• Company name, address, and contact information</li> <li>• Company name, address, and contact information of the company intending to import chemicals if the report is to be made by the representative of the foreign manufacturer/importer<sup>57)</sup></li> <li>• Company name, address, and contact information of the company commissioned for the manufacture of chemicals If the report is to be made by the manufacturer commissioning the activity</li> </ul>
Changes to be reported	<ul style="list-style-type: none"> <li>• Changes in weight or quantity manufactured per year (1 or more ton/10 or more tons/100 or more tons/1,000 or more tons)</li> <li>• Changes of category/markings of chemicals</li> <li>• Changes of purpose as per the purpose categorization system of chemicals (due to any new purpose confirmed)</li> <li>• Changes of company name, address, or contact information</li> </ul>

56) Existing chemicals announced/designated by the Minister of Environment following the screening by the Chemicals Review Committee based on the concern or likelihood of causing cancer, mutation, or abnormal reproductive capacity to humans or animals

57) Representative designated by the company intending to or currently engaging in the manufacture/import of chemicals or products for conducting tasks, such as application for registration on behalf of the company intending to or currently engaging in the manufacture/import of chemicals or products in Korea. The same shall apply hereinafter (Article 38 (1) of the Act on the Registration, Evaluation, etc. of Chemicals)

Classification		Details
Documents	Reporting	<ul style="list-style-type: none"> <li>Form for reporting the manufacture/import of existing chemicals (Attached Form No. 5-2 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals)</li> <li>Report certificate of representation by foreign manufacturer/importer (if the report is to be made by the representative designated by the foreign manufacturer/importer)</li> <li>Documents certifying the commissioning of the activity such as a copy of the commissioning contract (if the report is to be made by the company commissioning the manufacture of chemicals)</li> </ul>
	Report of changes	<ul style="list-style-type: none"> <li>Form for reporting changes in the manufacture/import of existing chemicals (Attached Form No. 5-2 of the Act on the Registration, Evaluation, etc. of Chemicals)</li> <li>Any document proving the changes</li> </ul>

## ② New chemicals

- Companies intending to manufacture/import 100 kg or more of new chemicals per year shall register such activities with the president of the National Institute of Environmental Research prior to starting the activity.

### ▶ Related regulations

- Article 10 (1) of the Act on the Registration, Evaluation, etc. of Chemicals
- Article 5 (1) of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

## ③ Chemicals designated/announced as object of registration

- Companies intending to manufacturer/import chemicals designated/announced as object of registration but not corresponding to the above shall register the activity with the president of the National Institute of Environmental Research within the period announced by the Minister of Environment.

### ▶ Related regulations

- Article 10 (5) of the Act on the Registration, Evaluation, etc. of Chemicals
- Article 10-3 (1), (2) of the Enforcement Decree of the Act on the Registration, Evaluation, etc. of Chemicals



## Registration and reporting of chemical substances

- Article 5 (1) of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

### ▶ Criteria for designation as chemicals requiring registration

- If the chemical is deemed to have serious concern of severe damage to humans or environment
- If the locally manufactured or imported quantity exceeds the following criteria:
  - Locally manufactured or imported quantity of a new chemical less than 100 kg of which is manufactured/imported by an individual manufacturer/importer: 1 ton
  - Locally manufactured or imported quantity of a new chemical less than 1 ton of which is manufactured/imported by an individual manufacturer/importer: 10 tons

### ▶ Procedure for designation/announcement as chemicals requiring registration

- The designation/announcement shall be made by the Minister of Environment following screening by the Chemicals Review Committee, if the chemical meets the requirements above.

### ▶ Registration period

- Within three years of the date of designation/announcement as chemicals requiring registration, the Minister of Environment shall make the announcement considering the hazard, risk, and/or locally distributed quantity.

### <Note> Required documents for registration application

#### ▶ Related regulations

- Article 10 (1), (5) of the Act on the Registration, Evaluation, etc. of Chemicals
- Article 5 (1) of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

#### ▶ Required documents

- Application form for registering the chemical (Attached Form No. 2 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals)
- Test report of each test item regarding the chemical and physical characteristics of the chemical<sup>58)</sup>
- Information regarding the risk of the chemical<sup>59)</sup>

58) Documents prepared as per the submission method in Attached Table No. 1 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

59) Documents prepared as per the preparation method in Attached Table No. 2 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

- Information regarding guidelines for the safe use of the chemical<sup>60)</sup>
- If the chemical is the intermediate product for separation on-site or during transportation, document confirming that the chemical is transported and used under strictly controlled conditions
- Exposure information regarding the purpose of the chemical<sup>61)</sup>
- The following documents are required as applicable:
  - If some of the required documents are not required: Grounds for or evidence of such exemptions
  - If some of the required documents may be replaced with others: Test plan per test item
  - If the applicant obtained confirmation for individual submission: A copy of the confirmation for individual submission
  - If confirmation is obtained, i.e., the owner of the vertebral test information does not agree to the use, confirmation of objection to the use of vertebral test information
  - If the applicant is a foreign manufacturer/importer, report certificate of representation by foreign manufacturer/importer
  - If information protection is to be requested, the application for information protection
  - If the applicant is a company commissioning the manufacturing/importing activity, document proving such commissioning such as a copy of the commissioning contract

### ► Attention

- **Regulations on the scope of exemption documents and object of exemption from registration application**

Among the chemicals requiring registration, those designated by the Presidential Decree may be exempted from some of the required documents.

- Proviso of Article 14 (1) of the Act on the Registration, Evaluation, etc. of Chemicals
- Article 13 of the Enforcement Decree of the Act on the Registration, Evaluation, etc. of Chemicals
- Article 5 (2) of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

60) Documents prepared as per the preparation method in Attached Table No. 3 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

61) Documents prepared as per the preparation method in Attached Table No. 8 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

## 01 Registration and reporting of chemical substances

- How to submit documents for the application for registration of existing chemicals: Joint submission
  - ▶ **Related regulations** Article 15 (1) of the Act on the Registration, Evaluation, etc. of Chemicals, Article 14 of its Enforcement Decree, and Article 16 (1) of its Enforcement Rules
  - ▶ **Details** An applicant intending to register an existing chemical during the grace period shall file the application individually, but some of the required documents shall be jointly submitted under the name of the representative applicant designated by all applicants. If the grounds for individual application apply, however, each applicant may file an individual application by obtaining confirmation from the Minister of Environment.

### B. Reporting and registering changes of information of chemicals

- Companies intending to change the currently registered information regarding their chemicals shall report or register such changes.
- The documents required for reporting or registering such changes shall be submitted to the president of the National Institute of Environmental Research.

#### ▶ Related regulations

- Article 12 (1), (2) of the Act on the Registration, Evaluation, etc. of Chemicals
- Articles 9-11 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

#### ▶ Matters requiring reporting/registration of changes

	Changes requiring reporting/registration	When to report/register
Registration	If the yearly quantity of manufactured/imported chemical has been changed to the weight range of higher tier from the range of quantity of manufactured/imported chemical as per the category of each item in Attached Table No. 6 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals.	Within 1 month of the date when the change occurred
	Changes in the purpose categorization system of the chemical	Within 1 month of the date when the change was recognized

	Changes requiring reporting/registration	When to report/register
Registration	If the specific purpose of the chemical has been changed, or a new purpose has been confirmed	Within 1 month of the date when the change was recognized
	If new information confirmed regarding the characteristic/hazard of the chemical has been recognized to require changes of category or marking of the chemical	Within 6 months of the date of recognizing the information (may be extended for another 6 months)
	If new information has been confirmed regarding the risk of the chemical that may affect humans or environment	
Report	If the company name or address is changed	Within 1 month of the date of change
	If the representative (of a legal person) is changed	
	If the member/structure of the importer of the chemical is changed (if initial registration was made by the representative designated by the foreign manufacturer/importer)	
	If the member/structure of the commissioned manufacturer of the chemical is changed (if initial registration was made by the company commissioning the activity)	

► Required documents

	Registration of changes	Report of changes
Documents	<ul style="list-style-type: none"> <li>• Application for registration of changes (Attached Form No. 2 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals)</li> <li>• Documents that can prove the changes</li> <li>• Information regarding the grounds for the changes</li> <li>• Original copy of registration notification of the chemical</li> </ul>	<ul style="list-style-type: none"> <li>• Report form for changes of chemicals (Attached Form No. 8 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals)</li> <li>• Documents that can prove the changes</li> </ul>



## Registration and reporting of chemical substances

### 04 Reporting chemicals

#### A. Reporting new chemicals

- Companies intending to manufacture or import new chemicals requiring reporting shall make the report.
- The documents required for the report shall be submitted to the president of the National Institute of Environmental Research.

##### ▶ Related regulations

- Article 10 (4) of the Act on the Registration, Evaluation, etc. of Chemicals
- Article 6-3 (1) of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

##### ▶ New chemicals requiring reporting

- If less than 100 kg of the new chemical will be manufactured/imported per year
- If the following new chemical obtained confirmation of exemption from risk screening as per the previous Hazardous Chemicals Control Act, and the applicant intends to manufacture/import the new chemical following confirmation of exemption:
  - If 100 kg or less of the new chemical will be manufactured/imported per year
  - If the new chemical is a high-molecule compound consisting of chemical substances only with no substance and which is designated and announced by the Minister of Environment<sup>62)</sup>

##### ▶ Required documents

- Form for reporting the manufacture/import of new chemicals (Attached Form No. 5-3 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals)
- Report certification of representation by the foreign manufacturer/importer (if applicable)
- Application for information protection (if information protection is to be requested)
- Documents certifying the commissioning of the activity, such as a copy of the commissioning contract (if applicable)
- Notification of confirmation of exemption from risk screening as per the previous Hazardous Chemicals Control Act (if applicable)
- Among the documents in Article 5 (1) 1 through 4 and Article 5 (1) 4-2 such as

62) High-molecule compounds requiring reporting (Ministry of Environment Announcement No. 2018-235)

documents on the physical and chemical characteristics of chemical substances and documents on hazardousness and risk, the ones that are in the possession of the applicant

## B. Reporting changes of new chemicals

- Companies intending to change the reported information shall report the changes.
- The documents required for the report shall be submitted to the president of the National Institute of Environmental Research.

### ► Related regulations

- Article 12 (3) of the Act on the Registration, Evaluation, etc. of Chemicals
- Article 11-2 (1), (2) of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

### ► Changes requiring reporting

	Changes requiring reporting	When to report
Report of changes	Change of company name or address	Within 1 month of the date of change
	Change of representative (of legal person)	
	Change of purpose of the chemical whose purpose categorization system has been changed	Within 1 month of the date the change was recognized
	If the purpose of the end user is changed, or a new purpose has been confirmed	
	If the category or marking requires changing as new risk or hazard of the chemical has been confirmed	
If new information has been confirmed regarding the characteristic/hazard of the chemical that may affect humans or environment		



## Registration and reporting of chemical substances

	Changes requiring reporting	When to report
Report of changes	If the member/structure of the importer of the chemical is changed (if initial registration was made by the representative designated by the foreign manufacturer/importer)	Within 1 month of the date of change
	If the member/structure of the commissioned manufacturer of the chemical is changed (if initial registration was made by the company commissioning the activity)	

### ► Required documents

- Report of changes of manufacture/import of new chemicals (Attached Form No. 5-3 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals)
- Documents that can prove the changes
- Information regarding the risk, hazard, and physical/chemical characteristics of chemicals among the documents under Article 5 (1) 1 through 4 and 4-2 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals, those related to the changes (if the applicant submitted the documents upon initial reporting)
- Application for information protection (if information protection is to be requested)
- Original registration notification of the chemical

### ► Attention Registration of chemicals or exemption from reporting

#### ► Related regulations

- Article 11 (1), (2) of the Act on the Registration, Evaluation, etc. of Chemicals
- Article 11 (1) of the Enforcement Decree of the Act on the Registration, Evaluation, etc. of Chemicals
- Article 7 (1) of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

#### ► Where registration or report of chemicals is exempted

- If the applicant intends to manufacture/import a chemical corresponding to any of the following:
  - The chemical is to be imported as part of machinery
  - The chemical is to be imported along with machinery or equipment for pilot operation
  - The chemical is contained in the product to function in certain solid form and is

not to be leaked in the process of using the product

- The chemical poses substantially low risk, and it will be screened by the Chemicals Review Committee and announced/designated by the Minister of Environment<sup>63)</sup>
- The chemical corresponds to one of the following, and it has been confirmed as an object of exemption from reporting or registration:
  - The whole quantity of the chemical will be manufactured/imported for export
  - The chemical will be manufactured or imported for the manufacture of another chemical the whole quantity of which will be exported
  - The chemical is a kind of reagent and is used for scientific experiments, analysis, or research
  - The chemical is for R&D corresponding to any of the following:
    - For the development of new chemical or product
    - For the improvement or development of a manufacturing process
    - For testing the applicability of the chemical at the premises of the applicant
    - For the pilot manufacturing of the chemical or the product
  - A high-molecule compound corresponding to one of the following:<sup>64)</sup>
    - A high-molecule compound whose number average molecular weight<sup>65)</sup> is 10,000 or more, whose molecules having molecular weight of less than 1,000 constitute less than 5 percent, and whose molecules having molecular weight of less than 500 account for less than 2 percent
    - A high-molecule compound whose number average molecular weight is 1,000-less than 10,000, whose molecules having molecular weight of less than 1,000 constitute less than 25 percent, and whose molecules having molecular weight of less than 500 account for less than 10 percent

**High-molecule compound not subject to confirmation of exemption from registration or reporting** (Article 11 (2) of the Enforcement Decree of the Act on the Registration, Evaluation, etc. of Chemicals)

63) Chemicals subject to exemption from registration or reporting (Ministry of Environment Announcement No. 2018-234)

64) Regulations related to the definition of high-molecule compound (Article 2, Subparagraph 3 of the Enforcement Decree of the Act on the Registration, Evaluation, etc. of Chemicals)

65) Regulations related to the definition of number average molecular weight (Article 2, Subparagraph 6 of the Enforcement Decree of the Act on the Registration, Evaluation, etc. of Chemicals)



## Registration and reporting of chemical substances

- Cationic high-molecule compound (those to be used as solid only and insoluble or non-distributable are excluded)
- High-molecule compound with number average molecular weight of less than 10,000 and containing more than 0.1 wt. percent of nonresponsive monomer corresponding to one of the following<sup>66)</sup>:
  - Hazardous chemicals<sup>67)</sup> - Hazardous chemicals
  - New chemicals (excluding import or manufacture of 1 ton or more per year and which passed the hazard review)

- The chemical subject to surface processing and the substance used for the processing fall under one of the following, and the chemical in question is created by processing the substance with the surface's functional group:
  - Registered chemical
  - Existing chemical qualifying for the grace period and which is reported as such
  - Reported new chemical
  - Chemical not requiring reporting or registration
- Non-separated intermediate<sup>68)</sup>
- Intermediate separated on-site whose leak or exposure is blocked with a technical measure

### ▶ Application for exemption from registration and/or reporting

- An applicant intending to apply for exemption from registration and/or reporting shall submit the required documents to the CEO of Korea Environmental Corporation.

66) Regulations related to the definition of monomer (Article 2, Subparagraph 4 of the Enforcement Decree of the Act on the Registration, Evaluation, etc. of Chemicals)

67) Refers to toxic substance, permitted substance, restricted substance, and prohibited substance (Article 2, Subparagraph 10 of the Act on the Registration, Evaluation, etc. of Chemicals)

68) Regulations related to the definition of non-separated intermediate (Article 2, Subparagraph 1 of the Enforcement Decree of the Act on the Registration, Evaluation, etc. of Chemicals)

## 05 Reporting controlled substances contained in a product

- Companies manufacturing or importing a product containing any controlled substances shall, if the product requires reporting, report the name of the controlled substance contained in the product, its content and hazard information, exposure, and purpose to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office prior to manufacturing or importing the product.
- They shall submit all the required documents to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office.

### ► Related regulations

- Article 32 (1) of the Act on the Registration, Evaluation, etc. of Chemicals
- Article 41 (1), (2) of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals

### ► Requirements for reporting the controlled substances contained in a product: If the product corresponds to all of the following:

- The amount of the individual controlled substances exceeds 0.1 wt. percent per product
- The total quantity of the controlled substance contained in all the products exceeds 1 ton per year

### ► Reporting period

- From the day following the day when it has been confirmed that more than 1 ton of substance per year (exceeding 0.1 wt. percent of the individual product) is contained in the product, to the day prior to commencing the manufacture/import of the product

### Exemption from reporting controlled substances contained in a product

If the total quantity in a product is expected to exceed 1 ton per year due to unavoidable reasons, thereby preventing the applicant from confirming the total quantity of individual chemical in a product, the applicant shall, prior to manufacturing/importing the product, report the reason and their personal information to the chief of the corresponding River Basin



## Registration and reporting of chemical substances

Environmental Office or Regional Environmental Office and submit the report of the controlled substance in the product and related required documents by April 30 of the following year.

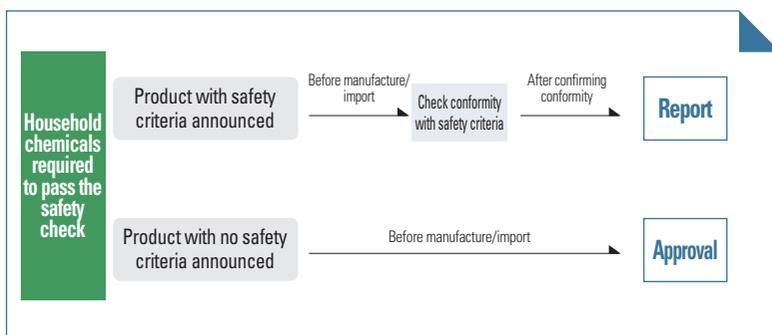
### ▶ Required documents

- Report of controlled substances contained in a product (Attached Form No. 28 of the Enforcement Rules of the Act on the Registration, Evaluation, etc. of Chemicals)
- User instruction of the product
- Photograph of the product
- The following documents, if applicable:
  - Where the person appointed by a foreign manufacture reports: Report of appointment by foreign manufacturer
  - Where information protection is requested: Information protection application form
  - Where the person consigned to manufacture chemicals reports: Documents certifying consignment, such as copy of consignment contract
  - Where exemption on the reporting period applies: Report of reported matters such as personal information and reason

## 02 Confirmation and approval of household chemical products subject to safety confirmation

### 01 Summary

- Companies intending to manufacture or import household chemicals required to pass the safety check based on the announced safety criteria shall pass the test of an accredited test agency.
- If the household chemical in question passes the safety check above, it shall be reported to the president of the Korea Environmental Industry Technology Institute (KEITI).
- Companies intending to manufacture or import household chemicals with no safety criteria announced shall obtain approval from the president of the National Institute of Environmental Research.



### 02 Terminology

Term	Definition
Chemical	Any of the products obtained by chemically modifying, extracting, or purifying naturally existing substances and those obtained by causing artificial reaction to elements and compounds (Article 3, Subparagraph 1 of the Safety Control Act of Household Chemicals and Biocidal Products)
Household chemicals	Chemicals used in daily life spaces such as houses, offices, or publicly used facilities and likely to cause leak to humans or environment (Article 3, Subparagraph 3 of the Safety Control Act of Household Chemicals and Biocidal Products)

## 02 Confirmation and approval of household chemical products subject to safety confirmation

Term	Definition
Household chemicals requiring safety check	Household chemicals designated/announced <sup>69)</sup> by the Minister of Environment as deemed to pose risk based on risk assessment (Article 3, Subparagraph 4 of the Safety Control Act of Household Chemicals and Biocidal Products)
Risk	Degree of damage to humans or environment upon exposure to harmful chemicals or biocidal products (Article 3, Subparagraph 2 of the Safety Control Act of Household Chemicals and Biocidal Products)

### ▶ Attention Scope of application of the Safety Control Act of Household Chemicals and Biocidal Products

#### ▶ Related regulations

○ Article 5 of the Safety Control Act of Household Chemicals and Biocidal Products

Article 5 (Applicability) A household chemical or a biocidal product corresponding to any of the items below shall not be subject to this act. If the chemical product is not manufactured, imported, sold, or used for the purpose of any of the following items, however, this act shall apply:

1. Health functional foods as per Article 3, Subparagraph 1 of the Health Functional Foods Act
2. Military supplies as per Article 2 of the Act on the Management of Military Supplies and Article 3, Subparagraph 2 of the Defense Acquisition Program Act (Routine items as per Article 3 of the Defense Acquisition Program Act are excluded.)
3. Pesticides, natural plant protector, raw materials thereof, or equipment utilizing pesticides as per Item 1, Article 2, Subparagraph 1, 1-2, 3, 3-2 of the Pesticides Control Act
4. Water treatment medicine as per Article 3, Subparagraph 5 of the Drinking Water Management Act
5. Single ingredient as per Article 2, Subparagraph 2 of the Control of Livestock and Fish Feed Act and auxiliary feed as per Subparagraph 4 of the same act
6. Treatment substances as per Article 2, Subparagraph 10 of the Ballast Water Management Act
7. Foods, food additives, utensils, containers, and packaging as per Article 2, Subparagraph 1, 2, 4, 5 of the Food Sanitation Act
8. Medications as per Article 2, Subparagraph 4 of the Pharmaceutical Affairs Act, quasi-drugs as per Subparagraph 7 of the same Act, and those for animals as per

69) Criteria for designation as household chemicals requiring safety check and criteria for marking safety information (Ministry of Environment Announcement No. 2019-45)

- Article 85 (1) of the same act
9. Hygiene products as per Article 2, Subparagraph 1 of the Hygiene Products Control Act
  10. Medical devices as per the subparagraphs of Article 2 (1) and other parts of the Medical Devices Act
  11. Cosmetics as per Article 2, Subparagraph 1 of the Cosmetics Act

### 03 Household chemicals required to pass the safety check

#### A. Checking compliance with the safety criteria

- Companies intending to manufacture or import household chemicals required to pass the safety check based on the announced safety criteria<sup>70)</sup> shall pass the compliance test of an accredited test agency. The validity of such test shall be three years from the date of test, and companies intending to manufacture or import such household chemicals required to pass the safety check after their validity expires shall pass such test again.

##### ► Related regulations

- Article 10 (1), (2) and (3) of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 5 (1) of the Enforcement Decree of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 5 (1) of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products

##### ► Required documents by the test agency

- Safety check application for household chemicals required to pass the safety check (Attached Form No. 1 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products)
- Documents providing product information such as photographs and user instruction
- Documents regarding the components, mixture ratio, and purpose of

70) Criteria for designation as household chemicals required to pass the safety check and marking of safety information (Ministry of Environment Announcement No. 2019-45)

## 02 Confirmation and approval of household chemical products subject to safety confirmation

the chemicals contained in the product as announced by the Minister of Environment<sup>71)</sup>

- Documents proving that the product passed the test of the container as per Article 17 of the High-pressure Gas Safety Control Act (applicable to spray-type products utilizing high-pressure gas)
- Documents proving that the product is compliant with the safety criteria of the container or packaging to protect children (if applicable)
- Documents certifying the commissioning of the activity, such as a copy of the commissioning contract, if the manufacturing activity of the household chemicals required to pass the safety check is commissioned
- A copy of the certificate of registration of legal person or business registration
- A copy of the test report of household chemicals required to pass the safety check (for application following the expiry of the original approval)

### <Note> Accredited test agencies for the safety check of household chemicals and approval of biocidal products

- ▶ **Related regulations** Article 41 (1), (2) of the Safety Control Act of Household Chemicals and Biocidal Products
- ▶ **Designated authorities** The Minister of Environment may designate the following organizations as accredited test agencies for the safety check of household chemicals and approval of biocidal products:
  - Korea Environmental Corporation
  - Korea Environmental Industry Technology Institute
  - Other organizations that the Minister of Environment deems to be capable of testing the compliance of household chemicals and biocidal products

## B. Reporting product compliance with the safety criteria

- The applicant company, after confirming the compliance of their product with the safety criteria of household chemicals required to pass the safety check, shall report the product to the president of the Korea Environmental Industry Technology Institute, including any changes in the initial reported information.

71) Criteria for designation as household chemicals required to pass the safety check and marking of safety information (Ministry of Environment Announcement No. 2019-45)

► **Related regulations**

- Article 10 (4) of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 5 (3), (4) of the Enforcement Decree of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 5 (3), (4) of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products

► **Time of reporting**

- Within 30 days of the date of accepting the notification of the safety test results for the household chemicals required to pass the safety check from the test agency

► **Information requiring reporting**

- Name, address, and contact information
- Product name, form, weight, quantity
- Documents providing product information such as photographs and user instruction
- Documents regarding the components, mixture ratio, and purpose of all substances contained in the product
- A product sample with the marking as per the marking criteria<sup>72)</sup>

► **Required documents**

	Initial report	Reporting changes
Documents	<ul style="list-style-type: none"> <li>• Report of compliance with the safety criteria (Attached Form No. 3 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products)</li> <li>• A copy of the test report of the household chemical required to pass the safety check</li> <li>• Documents providing product information such as photographs and user instruction</li> <li>• Documents regarding the components, mixture ratio, and purpose of all substances contained in the product</li> <li>• A sample of the household chemical required to pass the safety check</li> </ul>	<ul style="list-style-type: none"> <li>• Report of changes of compliance with the safety criteria (Attached Form No. 3 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products)</li> <li>• Original report of compliance with the safety criteria</li> <li>• Documents capable of proving the changes</li> </ul>

72) Refer to Article 10 (6) of the Safety Control Act of Household Chemicals and Biocidal Products

## 02 Confirmation and approval of household chemical products subject to safety confirmation

### 04 Household chemicals required to pass the safety check

- Companies intending to manufacture or import household chemicals required to pass the safety check with no safety criteria announced shall obtain approval from the president of the National Institute of Environmental Research
- They shall submit all the required documents to the president of the National Institute of Environmental Research..

#### ▶ Related regulations

- Article 10 (5) of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 6 (1) of the Enforcement Decree of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 6 (1) of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products

#### ▶ Required documents

- Application form for approval of the household chemical required to pass the safety check (Attached Form No. 5 of the Safety Control Act of Household Chemicals and Biocidal Products)
- The following information regarding the substances contained in the household chemical required to pass the safety check in order to provide its main functions:
  - Identification information such as name, molecular formula, and structural formula of the chemical
  - Purpose - Category and marking
  - Physical and chemical characteristics - Hazards
  - Risks including type and path of exposure
- The following information regarding the household chemicals required to pass the safety check:
  - Efficacy/Effect - Hazard
  - Test methods and criteria for analyzing the components
  - Information needed for the safe use of the product such as safety, emergency measures for cases such as leak, fire, or explosion and protective equipment
  - Documents certifying the commissioning of the manufacturing activity of the household chemical required to pass the safety check, such as a copy of the commissioning contract, if the activity is commissioned

# 03 Approval of biocidal chemicals and biocidal products

## 01 Summary

- Companies intending to manufacture or import a biocidal chemical to use for a biocidal product shall obtain approval from the president of the National Institute of Environmental Research.
- Companies intending to manufacture or import a biocidal product to offer it commercially or for local distribution shall obtain approval from the president of the National Institute of Environmental Research.



## 02 Terminology

Term	Definition
Chemical substances	Substances obtained by chemically modifying, extracting, or purifying naturally existing substances and those obtained by causing artificial reaction to elements and compounds (Article 3, Subparagraph 1 of the Safety Control Act of Household Chemicals and Biocidal Products)
Biocides	Referring to biocidal chemicals, biocidal products, and biocidal treatment products (Article 3, Subparagraph 6 of the Safety Control Act of Household Chemicals and Biocidal Products)
Biocidal substances	Chemicals, natural substances, or microorganisms used to remove, neutralize, or suppress hazardous organisms (Article 3, Subparagraph 7 of the Safety Control Act of Household Chemicals and Biocidal Products)

## 03 Approval of biocidal chemicals and biocidal products

Term	Definition
Biocidal products	<p>Any of the following products whose main purpose is the removal of hazardous organisms (Article 3, Subparagraph 8 of the Safety Control Act of Household Chemicals and Biocidal Products)</p> <ul style="list-style-type: none"> <li>• A product consisting of multiple biocidal chemicals or combination of biocidal chemicals and chemicals/natural substances or microorganisms that are not biocidal</li> <li>• A product generating a biocidal chemical from the combination of chemicals or combination of chemicals/natural substance or microorganisms</li> </ul>
Hazardous organisms	Organisms directly or indirectly providing negative impacts to humans or environment (Article 3, Subparagraph 5 of the Safety Control Act of Household Chemicals and Biocidal Products)
Risk	Degree of damage to humans or environment upon exposure to harmful chemicals or biocidal chemicals (Article 3, Subparagraph 2 of the Safety Control Act of Household Chemicals and Biocidal Products)

### ▶ Attention Scope of Application of the Safety Control Act of Household Chemicals and Biocidal Products

#### ▶ Related regulations

- Article 5 of the Safety Control Act of Household Chemicals and Biocidal Products Article 5 (Applicability) A household chemical or a biocidal product corresponding to any of the items below shall not be subject to this Act. If the chemical product is not manufactured, imported, sold, or used for the purpose of any of the following items, however, this Act shall apply:
1. Health functional foods as per Article 3, Subparagraph 1 of the Health Functional Foods Act
  2. Military supplies as per Article 2 of the Act on the Management of Military Supplies and Article 3, Subparagraph 2 of the Defense Acquisition Program Act (Routine items as per Article 3 of the Defense Acquisition Program Act are excluded.)
  3. Pesticides, natural plant protector, raw materials thereof, or equipment utilizing pesticides as per Article 2, Subparagraph 1, 1-2, 3 and 3-2 of the Pesticides Control Act
  4. Water treatment medicine as per Article 3, Subparagraph 5 of the Drinking Water Management Act
  5. Single ingredient as per Article 2, Subparagraph 2 of the Control of Livestock and Fish Feed Act and auxiliary feed as per Subparagraph 4 of the same Act
  6. Treatment substances as per Article 2, Subparagraph 10 of the Ballast Water Management Act

7. Foods, food additives, utensils, containers, and packaging as per Article 2, Subparagraph 1, 2, 4, and 5 of the Food Sanitation Act
8. Medications as per Article 2, Subparagraph 4 of the Pharmaceutical Affairs Act, quasi-drugs as per Article 2, Subparagraph 7 of the same Act, and those for animals as per Article 85 (1) of the same Act
9. Hygiene products as per Item 1, Article 2, Subparagraph 1 of the Hygiene Products Control Act
10. Medical devices as per the subparagraphs of Article 2 (1) and other parts of the Medical Devices Act
11. Cosmetics as per Article 2, Subparagraph 1 of the Cosmetics Act

### 03 Approval of chemicals affecting living organisms

#### A. Approval of chemicals affecting living organisms

- Companies intending to manufacture or import biocidal chemicals to use for a biocidal product shall obtain approval from the president of the National Institute of Environmental Research. Companies intending to manufacture or import biocidal chemicals after their approval expires shall obtain new approval.

##### ▶ Related regulations

- Article 12 (1), (4), (5) and Article 13 (1) of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 9 and Article 10 (1), (2) of the Enforcement Decree of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 8 and Article 9 (2) of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products

##### ▶ Validity of approval

Category	Validity
Biocidal chemicals corresponding to all of the following: <ul style="list-style-type: none"> <li>• Those subject to eased criteria for approval of biocidal chemicals</li> <li>• Those impacting sensitive respiratory organs and biocidal chemicals prescribed by Article 8 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products</li> </ul>	5 years

## 03 Approval of biocidal chemicals and biocidal products

Category	Validity
Biocidal chemicals corresponding to any of the following: <ul style="list-style-type: none"> <li>• Those subject to eased criteria for approval of biocidal chemicals</li> <li>• Those impacting sensitive respiratory organs and biocidal chemicals prescribed by Article 8 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products</li> </ul>	7 years
Other substances	10 years

### ► Required documents

- Approval application of biocidal chemicals (Attached Form No. 8 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products)
- Identification information such as chemical composition of the biocidal chemical
- The following information regarding the biocidal chemical:
  - Physical, chemical, or biological characteristics
  - Purpose, main path, and type of exposure
  - Hazards and risks to humans and environment - Efficacy/Effect
  - Category and marking – Handling warning and disposal method
  - Local and international information regarding use and regulations
- Raw materials and manufacturing process
- Comprehensive safety information
- Evidentiary documents providing the following, if applicable:
  - If the applicant intends to be subject to all or part of the eased approval criteria: Documents providing such fact
  - If the applicant is a manufacturer commissioning the manufacture of the biocidal chemical: Documents proving the fact of commissioned manufacturing, such as a copy of the commissioning contract
  - If the applicant obtained confirmation for individual submission<sup>73)</sup>: Confirmation of individual submission of approval application of the biocidal chemical
  - If the applicant intends to be exempted from submitting all or part of the required documents<sup>74)</sup>: Documents proving such fact
  - If confirmation is obtained, i.e., the owner of the vertebral test information does not agree to the use: A copy of confirmation of objection to the use of vertebral test information

73) Proviso of Article 19 (4) of the Safety Control Act of Household Chemicals and Biocidal Products

74) Article 13 (2) of the Safety Control Act of Household Chemicals and Biocidal Products

- If the applicant is getting renewed approval for the same biocidal chemical with the same information/documents as those submitted for the original approval: Documents proving such fact

### ► Attention Biocidal chemicals not required to obtain approval

- **Related regulations** Proviso of Article 12 (1) of the Safety Control Act of Household Chemicals and Biocidal Products and Article 8 of its Enforcement Decree
  - Biocidal chemicals announced by the Minister of Environment as a chemical with low risk after screening by the Household Chemical and Biocidal Product Control Committee
  - Biocidal chemicals used for scientific experiments, analysis, or research
  - Biocidal chemicals used for prototype biocidal products not to be offered commercially
  - Biocidal chemicals the whole quantity of which is to be exported

## B. Grace period for existing biocidal chemicals<sup>75)</sup>

- Companies intending to manufacture or import existing chemicals may do so without approval up to the expiry date of the grace period.
- Companies intending to do so shall report to the president of the National Institute of Environmental Research by June 30, 2019.
- Companies making such a report shall submit the plan of application for approval of biocidal chemical to the president of the National Institute of Environmental Research within one year of the date the existing biocidal chemical is designated/announced as subject to grace period<sup>76)</sup>

75) Biocidal chemical contained in a biocidal product locally distributed prior to December 31, 2018, the same shall apply hereinafter

76) If two or more companies filed the plan of application for approval of biocidal chemical for the same existing biocidal chemical (with identical name, chemical composition, and type of biocidal product for which it can be used) with the grace period applied, each of them shall apply for approval. Note, however, that some of the required documents shall be filed jointly by designating a representative of such companies. Companies with confirmation from the Minister of Environment may be exempted from this, in which case they may submit the required document individually (Article 19 (4) of the Safety Control Act of Household Chemicals and Biocidal Products)

## 03 Approval of biocidal chemicals and biocidal products

### ► Related regulations

- Article 19 (1) and Article 18 (1), (2) of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 14 and Attached Table No. 1 of the Enforcement Decree of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 14 (1), (2) of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products

### ► Grace period for approval

Classification	Grace period for approval
If the biocidal chemical is designated and announced by the Minister of Environment as subject to grace period as per the original report of the chemical	Within 10 years of the date of designation/announcement as an object of grace period as per the type of biocidal chemical
If the biocidal chemical is NOT designated and announced by the Minister of Environment as subject to grace period as per the original report of the chemical	Date of designation/announcement of existing chemical as subject to grace period

### ► Information to be reported

- Name or company name, address, and contact information
- Name, chemical composition, and manufactured or imported quantity of the existing chemical
- Type of biocidal product for which the existing biocidal chemical may be used
- Purity range of the existing biocidal chemical
- Detailed purpose of the existing biocidal chemical
- Local and international use and regulation information of the existing biocidal chemical

### ► Required documents

- Report of manufacture/import of the existing biocidal chemical (Attached Form No. 18 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products)
- Documents providing information on local and international use and regulation for the existing biocidal chemical
- If the manufacturing activity of the existing biocidal chemical is commissioned, documents proving such fact

### C. Report and approval of changes of biocidal chemicals

- An applicant intending to change an important part of the approved information of the biocidal chemicals shall obtain approval for the change while reporting other changes, if any.
- The applicant shall submit all the required documents for reporting changes of, or obtaining approval for, the information of biocidal chemicals to the president of the National Institute of Environmental Research.

#### ▶ Related regulations

- Article 15 of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 12 of the Enforcement Decree of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 11 (1) and Article 12 (1) of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products

#### ▶ Changes requiring report/approval

Classification	Changes requiring report/approval
Approval of changes	<ul style="list-style-type: none"> <li>• Change of hazard/risk</li> <li>• Change of name</li> <li>• Change of purpose</li> <li>• Change of manufacturing methods including processes</li> <li>• Change of purity range that should be maintained</li> <li>• Change of characteristics of permitted impurities and their content range</li> <li>• Change of type of biocidal product to be used</li> <li>• Change of scope of users</li> <li>• Change of efficacy/effect</li> <li>• Change of location of manufacturing facilities</li> </ul>
Report of changes	Change of name of representative, company name, address, contact information, or any originally approved information

#### ▶ Required documents

	Approval of changes	Report of changes
Documents	<ul style="list-style-type: none"> <li>• Application for approval of changes of biocidal chemicals (Attached Form No. 14 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products)</li> <li>• Documents that can prove the changes</li> <li>• Original approval notification of biocidal chemicals</li> </ul>	<ul style="list-style-type: none"> <li>• Report of changes of approved information of biocidal chemicals (Attached Form No. 15 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products)</li> <li>• Documents that can prove the changes</li> <li>• Original approval notification of biocidal chemicals</li> </ul>

## 03 Approval of biocidal chemicals and biocidal products

### <Note> Recognition of equivalence of biocidal chemicals

- ▶ **Related regulations** Article 16 (1) and Article 32 (1) 2 of the Safety Control Act of Household Chemicals and Biocidal Products
- ▶ **Details** To have the equivalence between two approved biocidal chemicals recognized, an application for recognition of similarity should be filed to the president of the National Institute of Environmental Research with the documents proving equivalence attached. In the case where documents are already submitted to the president, the documents can be used after obtaining the document owner's consent for use of the documents.

## 04 Approval of biocidal products

### A. Approval of biocidal products

- Companies intending to manufacture or import biocidal products for local sales or distribution shall obtain approval from the president of the National Institute of Environmental Research.

New approval shall be required in order to manufacture or import a previously approved biocidal product after its approval expires.

#### ▶ Related regulations

- Article 20 (1), (5), (6) and Article 21 (1) of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 17, Article 18 (1), (2) of the Enforcement Decree of the Safety Control Act of Household Chemicals and Biocidal Products

#### ▶ Validity of approval

Classification	Validity
Biocidal products corresponding to any of the following: <ul style="list-style-type: none"> <li>• Those subject to eased criteria for approval of biocidal chemicals</li> <li>• Those impacting sensitive respiratory organs and biocidal chemicals prescribed by Article 8 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products</li> </ul>	5 years

Classification	Validity
<b>Biocidal products corresponding to all of the following:</b> <ul style="list-style-type: none"> <li>• Those subject to eased criteria for approval of biocidal chemicals</li> <li>• Those impacting sensitive respiratory organs and biocidal chemicals prescribed by Article 8 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products</li> </ul>	3 years
<b>Other products</b>	10 years

► **Required documents**

- Application for approval of the biocidal product (Attached Form No. 21 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products)
- The following information regarding the components of the biocidal product:
  - Components, mixture ratio, and use and purpose of all substances of the product including biocidal chemical
  - Company name and address of the supplier of the biocidal chemical contained in the biocidal product
  - Name, use, and purpose of any nano substances contained in the biocidal product (if purposefully contained)
- The following information regarding the biocidal product:
  - Physical, chemical, or biological characteristics
  - Purpose and main path/type of exposure
  - Risk and hazard to humans and environment – Efficacy and effect
  - Category, marking, and packaging
  - Cautions of use and disposal method
  - Information on local and international use and regulation
- Raw materials and manufacturing process
- Information proving use of safe container or packaging in order to prevent incidents from handling or use of the biocidal product as per the criteria to prevent safety incidents<sup>77)</sup>
- Plan or status of installing or operating manufacturing and storage facilities meeting the criteria<sup>78)</sup> to maintain their conditions as approved

77) Article 20 (2) 6 of the Safety Control Act of Household Chemicals and Biocidal Products

78) Article 20 (7) of the Safety Control Act of Household Chemicals and Biocidal Products

## 03 Approval of biocidal chemicals and biocidal products

- Comprehensive information regarding the safety of the biocidal product
- Documents proving the following if applicable:
  - If the applicant intends to meet all or part of the eased approval criteria: Documents proving such fact
  - If the applicant is a company commissioning the manufacture of the biocidal product: Documents proving such commissioning, such as copy of commissioned manufacturing contract
  - If the applicant intends to be exempted<sup>79)</sup> from all or part of the required document: Documents proving such fact
  - If confirmation is obtained, i.e., the owner of the vertebral test information does not agree to the use, confirmation of objection to use the vertebral test information
  - If the applicant intends to obtain a second approval, and the documents are identical to the ones previously filed: Documents proving such fact

### <Note> Grace period for approval of biocidal product

- ▶ **Related regulations** Article 3 of the Supplementary Provision of the Safety Control Act of Household Chemicals and Biocidal Products (Law No. 15511, Enacted on Mar. 20, 2018)
- ▶ **Grace period for approval** The applicant may manufacture or import the biocidal product without obtaining approval for the product until the expiry of the grace period.

Classification	Grace period for approval
If all biocidal chemicals contained in the biocidal product are the existing ones qualifying for the grace period for approval	Within two years from the expiry <sup>80)</sup> of the grace period for the existing biocidal chemicals
Products not corresponding to the case above	Within one year from the date of designation/announcement of the existing biocidal chemical qualifying for the grace period

79) Article 21 (2) of the Safety Control Act of Household Chemicals and Biocidal Products

80) Later expiry if the product contains multiple existing biocidal chemicals with different grace period of approval applied

**▶ Attention Biocidal products that do not require approval**

- ▶ **Related regulations** Proviso of Article 20 (1) of the Safety Control Act of Household Chemicals and Biocidal Products and Article 16 of its Enforcement Decree
  - Biocidal products for scientific research, analysis, or experiments
  - Prototype of biocidal products not commercially offered
  - Biocidal products the whole quantity of which will be exported, etc.

**B. Approval and report of changes of biocidal products**

- An applicant intending to change an important part of the approved information of the biocidal product shall obtain approval for the change while reporting other changes, if any.
- The applicant shall submit all the required documents for reporting changes of, or obtaining approvals for, the information of the biocidal product to the president of the National Institute of Environmental Research.

**▶ Related regulations**

- Article 23 of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 20 of the Enforcement Decree of the Safety Control Act of Household Chemicals and Biocidal Products
- Article 22 (1) and Article 23 (1) of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products

**▶ Changes requiring approval/report**

	Changes requiring approval/report
Approval of changes	<ul style="list-style-type: none"> <li>• Change of hazard/risk</li> <li>• Change of efficacy/effect</li> <li>• Change of name and type</li> <li>• Change of target user and range of use</li> <li>• If the biocidal product is used for a biocidal processing product, change of the type and user instructions of the latter</li> <li>• Change of the components and mixture ratio of the substance among those contained in the biocidal product, corresponding to any of the following:                             <ul style="list-style-type: none"> <li>- Biocidal chemical</li> <li>- Hazardous chemical</li> <li>- Controlled substance</li> </ul> </li> <li>• Change of the component and mixture ratio of the substance among those contained in the biocidal product but not corresponding to any of the above (applicable only if the category and marking of the biocidal product are to be changed)</li> </ul>

## 03 Approval of biocidal chemicals and biocidal products

	Changes requiring approval/report
Approval of changes	<ul style="list-style-type: none"> <li>• Change of the following information regarding the biocidal product:               <ul style="list-style-type: none"> <li>- Form</li> <li>- Standard dose and user instruction</li> <li>- Shelf life</li> <li>- Cautions for use</li> <li>- Purpose</li> </ul> </li> </ul>
Report of changes	Change of company name, name of representative, address, contact information, and other information

### ► Required documents

	Approval of changes	Report of changes
Documents	<ul style="list-style-type: none"> <li>• Application for approval of changes of biocidal products (Attached Form No. 25 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products)</li> <li>• Documents that can prove the changes</li> <li>• Original notification of approval of biocidal products</li> </ul>	<ul style="list-style-type: none"> <li>• Report of changes of biocidal products (Form No. 15 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products)</li> <li>• Documents that can prove the changes</li> <li>• Original notification of approval of biocidal products</li> </ul>

### ► Attention Exceptional approval of biocidal products

- **Related regulations** Article 24 (1), (2) of the Safety Control Act of Household Chemicals and Biocidal Products and Article 21 of its Enforcement Decree
- **Products subject to exceptional approval** Biocidal products meeting all of the following requirements:
  - Biocidal product wherein all biocidal chemicals contained therein are announced by the Minister of Environment as a chemical with low risk after screening by the Household Chemical and Biocidal Product Control Committee
  - Biocidal chemicals contained in the biocidal product which do not correspond to any of the following:
    - Controlled substance
    - Nano substance
    - Hazardous chemical or persistent organic pollutant
  - Capable of providing sufficient efficacy/effect such as removal of hazardous organisms
  - Shall not require any personal protective equipment for handling or using

- **Products subject to exceptional approval** An exceptional approval for a biocidal product requires submitting an application to the president of the National Institute of Environmental Research together with all the required documents.
- Application for exceptional approval of product (Attached Form No. 26 of the Enforcement Rules of the Safety Control Act of Household Chemicals and Biocidal Products)
  - The following information regarding the chemicals contained in the biocidal product:
    - Components, mixture ratio, and purpose and use of all chemicals contained in the biocidal product, including biocidal chemicals
    - Company name and address of the supplier of the biocidal chemicals contained in the biocidal product
  - Raw materials and manufacturing process of the biocidal product
  - Cautions on use and disposal method
  - Information proving use of safe container or packaging in order to prevent incidents from handling or use of the biocidal product as per the criteria to prevent safety incidents<sup>81)</sup>
  - Plan or status of installing or operating manufacturing and storage facilities meeting the criteria to maintain their conditions as approved<sup>82)</sup>
  - If the applicant is a company commissioning the manufacture of the biocidal product, documents proving the fact of commissioning such as commissioning contract
  - Documents proving that the biocidal product meets all requirements for exceptional approval

**<Note> Acknowledgment of similarity of biocidal product**

- **Related regulations** Article 25 (1) and Article 32 (1) 4 of the Safety Control Act of Household Chemicals and Biocidal Products
- **Details** To have the similarity between two approved biocidal chemicals recognized, an application for recognition of similarity should be filed to the president of the National Institute of Environmental Research with the documents proving similarity attached. In the case where documents are already submitted to the president, the documents can be used after obtaining the document owner's consent for use of the documents.

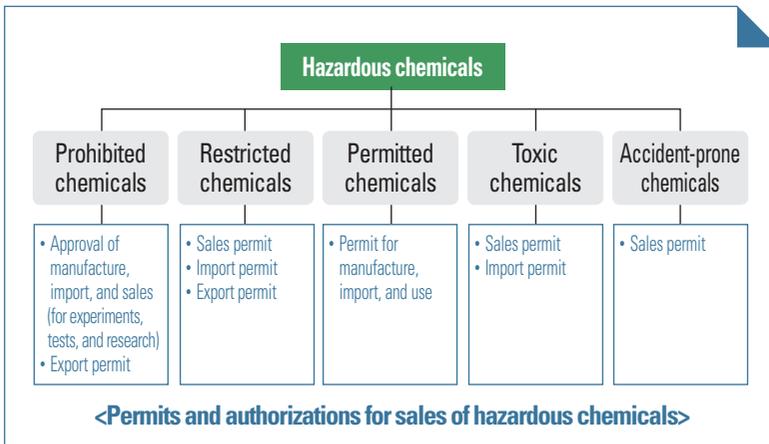
81) Article 20 (2) 6 of the Safety Control Act of Household Chemicals and Biocidal Products

82) Article 20 (7) of the Safety Control Act of Household Chemicals and Biocidal Products

# Permit/License and obligations for handling hazardous chemicals

## 01 Summary

- Companies intending to handle hazardous chemicals shall obtain approval per chemical or report the handling activity.
- Companies intending to handle hazardous chemicals shall comply with regulations including the handling criteria and wearing of personal protective equipment.
- Companies intending to install and operate facilities for handling hazardous chemicals shall comply with regulations such as preparing and submitting the offsite risk assessment report and criteria for placing, installing, and managing such facilities and conduct inspection and safety diagnosis.
- Companies intending to handle accident-prone chemicals shall comply with regulations such as preparing and submitting the risk control plan and regular notification to the local residents close to their premises.



## 02 Terminology

Term	Definition
<b>Chemicals</b>	Products obtained by chemically modifying, extracting, or purifying naturally existing substances and those obtained by causing artificial reaction to elements and compounds (Article 2, Subparagraph 1 of the Chemical Substances Control Act)
<b>Toxic chemicals</b>	Chemicals with toxicity as designated and announced by the Minister of Environment as per the criteria for designating toxic chemicals <sup>83)</sup> (Article 2, Subparagraph 2 of the Chemical Substances Control Act)
<b>Permitted chemicals</b>	Chemicals with concerns of hazards and announced as such by the Minister of Environment following discussions with the chiefs of central administrative institutions and the Minister of Environment and screening by the Chemicals Review Committee so that they can be manufactured, imported, or used only upon obtaining a permit from the Minister of Environment (Article 2, Subparagraph 3 of the Chemical Substances Control Act)
<b>Restricted chemicals</b>	Chemicals deemed as highly risky if used for certain purposes and announced <sup>84)</sup> by the Minister of Environment as such following discussions with the chiefs of central administrative institutions and the Minister of Environment and screening of the Chemicals Review Committee so that their manufacture, import, sales, storing/keeping, transport, or use for such purposes shall be prohibited (Article 2, Subparagraph 4 of the Chemical Substances Control Act)
<b>Prohibited chemicals</b>	Chemicals deemed as highly risky and announced <sup>85)</sup> by the Minister of Environment as such following discussions with the chiefs of central administrative institutions and the Minister of Environment and screening by the Chemicals Review Committee so that their manufacture, import, sales, storing/keeping, transport, or use for such purposes is prohibited (Article 2, Subparagraph 5 of the Chemical Substances Control Act)
<b>Accident-prone chemicals</b>	Chemicals with concerns of high probability of chemical accidents due to high acute toxicity and explosiveness or extensive damage in case of an accident and designated and announced <sup>86)</sup> as such by the Minister of Environment as per Article 39 of the Chemical Substances Control Act (Article 2, Subparagraph 6 of the Chemical Substances Control Act)
<b>Hazardous chemicals</b>	Chemicals such as toxic chemicals, permitted chemicals, restricted chemicals, prohibited chemicals, accident-prone chemicals, or those with high likelihood or concerns of hazards or risks (Article 2, Subparagraph 7 of the Chemical Substances Control Act)

83) Article 2 and Attached Table No. 1 of the Enforcement Decree of the Act on the Registration, Evaluation, etc. of Chemicals

84) Designation of restricted/prohibited chemicals (Ministry of Environment Announcement No. 2018-139)

85) Designation of restricted/prohibited chemicals (Ministry of Environment Announcement No. 2018-139)

86) Designation of accident-prone chemicals (Ministry of Environment Announcement No. 2017-107)

## 04 Permit/License and obligations for handling hazardous chemicals

Term	Definition
Sales of hazardous chemicals	Sales of chemicals other than permitted and prohibited chemicals among hazardous chemicals (Article 2, Subparagraph 8 of the Chemical Substances Control Act)
Hazard	Characteristics inherent to chemicals and which wield adverse effects on human health or environment, such as toxicity (Article 2, Subparagraph 9 of the Chemical Substances Control Act)
Risk	Degree of damage to humans or environment upon exposure to harmful chemicals (Article 2, Subparagraph 10 of the Chemical Substances Control Act)
Handling facilities	Facilities or installations for manufacturing, storing, keeping, transporting (excluding transportation with aircraft, ship, or train), or using chemicals (Article 2, Subparagraph 11 of the Chemical Substances Control Act)
Handling	Activity of manufacturing, importing, selling, storing/keeping, transporting, or using (Article 2, Subparagraph 12 of the Chemical Substances Control Act)
Chemical accidents	Situations arising from the exposure of humans or environment to chemicals due to errors of personnel while conducting tasks such as replacement of facilities, deficiency and aging of facilities, natural disaster, or traffic accidents (Article 2, Subparagraph 13 of the Chemical Substances Control Act)

### ▶ Attention Applicability of the Chemical Substances Control Act

#### ▶ Related regulations

- Article 3 of the Chemical Substances Control Act

#### Article 3 (Applicability)

- ① This Act shall not apply to chemicals corresponding to any of the following:

1. Radioactive materials as per Article 2, Subparagraph 5 of the Nuclear Safety Act
2. Medications and quasi-drugs as per Article 2, Subparagraph 4, 7 of the Pharmaceutical Affairs Act
3. Narcotics as per Article 2, Subparagraph 1 of the Narcotics Control Act
4. Cosmetics and their raw materials as per Article 2, Subparagraph 1 of the Cosmetics Act
5. Pesticides and their raw materials as per Article 2, Subparagraph 1 of the Pesticides Control Act
6. Fertilizers as per Article 2, Subparagraph 1 of the Fertilizer Control Act
7. Foods, food additives, utensils, containers, and packaging as per Article 2, Subparagraph 1, 2, 4, and 5 of the Food Sanitation Act

8. Livestock and fish feed as per Article 2, Subparagraph 1 of the Control of Livestock and Fish Feed Act
  9. Explosives as per Article 2 (3) of the Act on the Safety Management of Guns, Swords, Explosives, etc.
  10. Military supplies as per Article 2 of the Act on the Management of Military Supplies and Article 3, Subparagraph 2 of the Defense Acquisition Program Act (Routine items as per Article 3 of the Defense Acquisition Program Act are excluded.)
  11. Health functional foods as per Article 3, Subparagraph 1 of the Health Functional Foods Act
  12. Medical devices as per Article 2 (1) of the Medical Devices Act
  13. Toxic gas as per the High-pressure Gas Safety Control Act
- ② Notwithstanding Paragraph 1, chemicals corresponding to Paragraph 1, Subparagraph 13 shall be governed by Articles 4-23 (Article 6 (3) 1 to 5, Article 13, 16, 19 and 20 shall be excluded), Article 26, Article 39-50 (Article 49 (1) 7, 8 and Article 50 (1) 6 shall be excluded), Article 52, Article 54-64 (Article 54, Subparagraph 8-13, Article 58, Subparagraph 4, 5, Article 59, Subparagraph 7-9, Article 59, Subparagraph 11, Article 61, Subparagraph 4, Article 64 (1) 5-9 and Article 64 (2) 4 shall be excluded).
- ③ Notwithstanding Paragraph 1, this Act shall apply except in cases wherein there are special regulations in other related Acts regarding the management of chemicals and response to chemical accidents as per Paragraph 1, Subparagraph 2-13.

#### <Note> Verification of chemicals

##### ► Details

- Companies intending to manufacture or import chemicals shall verify the product or its components and submit evidence of verification such as verification statement to the association related to the control of chemicals<sup>87)</sup>.
- If deemed necessary for such verification, the applicant may apply for the verification of the chemical or its components with the association related to the control of chemicals.

##### ► Related regulations

- Article 9 (1), (2), (3) of the Chemical Substances Control Act
- Article 2 (1), (2) of the Enforcement Rules of the Chemical Substances Control Act

87) Associations established with a permit from the Minister of Environment as per Article 53 (1) of the Chemical Substances Control Act, the same shall apply hereinafter

## 04 Permit/License and obligations for handling hazardous chemicals

### ► Chemicals requiring verification

- Existing chemicals as per Article 2, Subparagraph 3 of the Act on the Registration, Evaluation, etc. of Chemicals
- New chemicals as per Article 2, Subparagraph 4 of the Act on the Registration, Evaluation, etc. of Chemicals
- Permitted chemicals ○ Restricted chemicals ○ Prohibited chemicals
- Accident-prone chemicals ○ Hazardous chemicals

### ► Exceptions to verification

- Chemicals meeting certain requirements as determined and announced<sup>88)</sup> by the Minister of Environment, such as existing in certain solid form contained in a product providing certain functions and not getting leaked in the process of using it.

### ► Required documents

	Submitting the verification statement of chemicals	Applying for verification of chemicals
Documents	<ul style="list-style-type: none"> <li>• Verification statement of chemicals (Attached Form No. 1 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Among the following, the documents used for the verification of the chemical:               <ul style="list-style-type: none"> <li>- Document indicating the name, content, and CAS (Chemical Abstract Service), number of chemicals contained in the product to manufacture or import</li> <li>- Documents related to the verification provided by the manufacturer, exporter, or party commissioned with the verification task</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Application for verification of chemicals (Attached Form No. 2 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Component statement indicating the name, content, and CAS, number of chemicals contained in the product for which a verification statement is needed.</li> </ul>

## 03 Obligations for handling hazardous chemicals

### A. Compliance with criteria for handling hazardous chemicals

- Anyone handling hazardous chemicals shall comply with the criteria for handling hazardous chemicals.

<sup>88)</sup> Criteria for exceptions to the verification of chemicals (Ministry of Environment Announcement No. 2015-162)

► **Related regulations** Article 13 of the Chemical Substances Control Act

► **Criteria for handling hazardous chemicals**

- Facilities used for handling hazardous chemicals shall be properly maintained so that they can provide the originally intended performance.
- There shall be preventive measures against incidents in the process of handling hazardous chemicals, including protective equipment and medicine for emergency measures in case of a chemical accident.
- Different hazardous chemicals shall not be stored/kept together or in mixed state.
- The chief chemical officer shall join the task of loading or unloading hazardous chemicals on the vehicle or transporting them to the handling facilities.
- The person transporting hazardous chemical shall be the chief chemical officer or one who has completed related safety training.
- Any other matters determined by the Ordinance of the Ministry of Environment as needed for the safe control of hazardous chemical and equivalent to the regulations above<sup>89)</sup>.

## B. Personal protective equipment (PPE)

- The person handling gaseous hazardous chemicals shall put on the PPE appropriate for the type of hazardous chemical that they handle.

► **Related regulations** Article 14 (1) of the Chemical Substances Control Act and Article 9 of its Enforcement Rules

► **Cases requiring PPE**

- Where handling gaseous hazardous chemicals
- Where gas may be generated from liquid hazardous chemicals
- Where there may be presence or dispersion of powder or particles of solid hazardous chemical
- Where handling hazardous chemicals indoors such as in the laboratory
- Where safety measures are needed in the process of transporting hazardous chemicals to different handling facilities
- Where handling hazardous chemicals with inhalation toxicity
- Where unloading or loading hazardous chemicals
- Where handling hazardous chemicals stimulating the eyes or skin

89) Article 8 and Attached Table No. 1 of the Enforcement Rule of the Chemical Substances Control Act

## 04 Permit/License and obligations for handling hazardous chemicals

- Where conducting maintenance or repair of handling facilities of hazardous chemicals
- Other cases as needed for the safety control of hazardous chemicals as recognized and announced
- Other cases as needed for the safety control of hazardous chemicals as recognized and announced<sup>90)</sup> by the Minister of Environment

### C. Plan for displaying and storing hazardous chemicals

- Companies intending to display and/or store hazardous chemicals in excess of a certain quantity shall obtain approval from the chief of the corresponding River Basin Environmental Office or Regional Environmental Office by submitting the plan for displaying and storing hazardous chemicals. Companies without facilities for storing/keeping hazardous chemicals shall not be allowed to do so.

▶ **Related regulations** Article 15 (1), (2) of the Chemical Substances Control Act, Article 10 (1), (2) of the Enforcement Rules of the Act

▶ **Chemicals requiring verification**

- Toxic chemicals: In excess of 500 kg
- Permitted chemicals, restricted chemicals, prohibited chemicals, accident-prone chemicals: In excess of 100 kg

▶ **Required documents**

- Plan for displaying/storing hazardous chemicals (Attached Form No. 7 of the Enforcement Rules of the Chemical Substances Control Act)

### D. Filing a hazardous chemicals transportation plan

- Companies intending to transport hazardous chemicals in excess of a certain quantity at one time shall prepare and submit a transportation plan in advance to obtain approval from the chief of the corresponding River Basin Environmental Office or Regional Environmental Office.

A copy of such plan shall be presented by the personnel transporting the chemicals including the driver of the vehicle and the convoy.

90) Regulations on wearing of PPE by personnel handling hazardous chemicals (National Institute of Chemical Safety Announcement No. 2017-7)

- ▶ **Related regulations** Article 15 (3) of the Chemical Substances Control Act and Article 11 (1)-(3) of its Enforcement Rules
- ▶ **Chemicals requiring a transportation plan**
  - Toxic chemicals: In excess of 5,000 kg
  - Permitted chemicals, restricted chemicals, prohibited chemicals, accident-prone chemicals: In excess of 3,000 kg
- ▶ **Required documents**
  - Hazardous chemicals transportation plan (Attached Form No. 9 of the Enforcement Rules of the Chemical Substances Control Act)

## E. Marking of hazardous chemicals

- There shall be markings of the hazardous chemicals on their handling facilities, containers, or packaging.  
This provision shall apply regardless of the quantity at which the hazardous chemicals are commercially offered.

- ▶ **Related regulations** Article 16 (1), (2) of the Chemical Substances Control Act and Article 12 (1) of its Enforcement Rules
- ▶ **Where to put the markings**
  - Facilities storing hazardous chemicals and where they are displayed/kept
  - Vehicles transporting hazardous chemicals (including shipping container and mobile tank lorry)
  - Container/Packaging of hazardous chemicals
  - Premises of companies installing and operating facilities<sup>91)</sup> for handling hazardous chemicals
- ▶ **Information to be marked on hazardous chemicals**
  - Name: Name of hazardous chemicals and products
  - Pictogram: Image depicting the hazards
  - Illustrative word(s): To indicate the degree of hazard such as Danger or Warning
  - Illustrative expressions: To indicate the degree of hazard
  - Preventive word(s): To indicate measures to minimize or prevent hazards due to poor handling/storing

91) Facilities smaller than those designated by Article 19 (3) of the Enforcement Rules of the Chemical Substances Control Act are excluded.

## 04 Permit/License and obligations for handling hazardous chemicals

- Supplier information: Company name of the supplier including legal person, phone number, and address
- UN number (UN ID): Numbers that identify dangerous goods, hazardous substances, and articles (such as explosives, flammable liquids, toxic substances) for protection during the international transportation of hazardous chemicals and products

### ▶ How to provide the marking of hazardous chemicals

- Refer to Article 12 (2) and Attached Table No. 2 of the Chemical Substances Control Act.

## 04 Permit and report of hazardous chemicals

### A. Permit for manufacturing, importing, and selling prohibited chemicals

- In principle, no one shall be allowed to handle prohibited chemicals. Exceptions are cases wherein the companies obtain a permit from the chief of the corresponding River Basin Environmental Office or Regional Environmental Office in order to manufacture, import, and sell chemicals such as experimenting, researching, and testing reagent.

Likewise, such companies shall obtain approval for changes or report the changes when intending to change the details of the permit.

### ▶ Related regulations

- Article 18 (1), (2) of the Chemical Substances Control Act
- Article 14 (1), (3), (4) of the Enforcement Rules of the Chemical Substances Control Act

### ▶ Cases requiring approval and report of changes

	Approval of changes	Report of changes
Cases	<ul style="list-style-type: none"> <li>• Change of type and content of prohibited chemical with permit</li> <li>• Increase of planned quantity with permit (20% or more)</li> <li>• Increase of total capacity of storage facilities (20% or more)</li> <li>• Change of purpose of prohibited chemical with permit</li> <li>• Change of location of premises (excluding cases wherein the applicant has the office only)</li> </ul>	<ul style="list-style-type: none"> <li>• Company name, name of representative, or actual address of the office</li> </ul>

► **Required documents**

	Permit	Approval or report of changes
Documents	<ul style="list-style-type: none"> <li>• Application for permit to manufacture, import, or sell prohibited chemicals (Attached Form No. 12 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Plan for use and sales of prohibited chemicals</li> </ul>	<ul style="list-style-type: none"> <li>• Application for change of permit for manufacturing, importing, or selling prohibited chemicals/Report of changes (Attached Form No. 14 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Documents proving the changes</li> <li>• Original permit</li> </ul>

**B. Permit for manufacturing, importing, and using permitted chemicals**

- Companies intending to manufacture, import, or use permitted chemicals shall obtain approval from the chief of the corresponding River Basin Environmental Office or Regional Environmental Office. Such companies shall submit all the required documents to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office.

If multiple companies intend to manufacture, import, or use the same permitted chemicals, they may jointly apply for the permit only if the purpose of the chemical is the same for all the companies.

► **Related regulations**

- Articles 19 (1), (3) of the Chemical Substances Control Act
- Article 15 (1) of the Enforcement Rules of the Chemical Substances Control Act

► **Required documents**

- Application for permit to manufacture, import, or use permitted chemicals (Attached Form No. 16 of the Chemical Substances Control Act)
- Detailed statement of purpose of the chemical
- Information regarding the risk of the chemical
- Analysis of alternative(s) to the chemical and its(their) feasibility
- Alternative plan

## 04 Permit/License and obligations for handling hazardous chemicals

### ▶ Attention Permitted chemicals exempted from permit

- ▶ **Related regulations** Article 19 (2) of the Chemical Substances Control Act and Article 9 of its Enforcement Decree
- ▶ **Object of exemption**
  - Chemicals to be imported as contained in machinery
  - Chemicals to be imported along with machinery or equipment for its pilot operation
  - Chemicals in certain solid form contained in a product providing certain functions and not leaked in the process of using it
  - Chemicals to be imported for use or research
  - Chemicals manufactured, imported or used no more than 100 kg per year

### C. Import of restricted chemicals

- In principle, no one shall be allowed to handle restricted chemicals for restricted purposes.
- Exceptions are cases wherein the purpose is clear and properly manageable, and the company using the chemical obtained a permit from the chief of the corresponding River Basin Environmental Office or Regional Environmental Office in order to import the chemical. Likewise, such companies shall obtain approval for changes or report the changes when intending to change the details of the permit.
- Such companies shall obtain approval for changes when intending to change the details of the permit and shall report the changes within 30 days of the date the changes occurred.

- ▶ **Related regulations**
  - Article 18 (4) and Article 20 (1), (4) of the Chemical Substances Control Act and Article 16 (1), (3), (4) of its Enforcement Rules
- ▶ **Matters subject to approval or report of change**

	Approval of change	Report of changes
Cases	<ul style="list-style-type: none"> <li>• Change of type and content of restricted chemical with permit</li> <li>• Increase of planned quantity with permit (50% or more)</li> <li>• Increase of total capacity of storage facilities (50% or more)</li> <li>• Change of purpose of restricted chemical with permit</li> <li>• Change of location of premises (excluding the case wherein the applicant has the office only)</li> </ul>	<ul style="list-style-type: none"> <li>• Company name, name of representative, or actual address of the office</li> </ul>

► **Required documents**

	Permit	Approval or report of changes
Documents	<ul style="list-style-type: none"> <li>• Application for permit to manufacture, import, or sell restricted chemicals (Attached Form No. 19 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Detailed purpose of the restricted chemical</li> <li>• A copy of the sales permit for hazardous chemicals (if such permit is previously obtained)</li> </ul>	<ul style="list-style-type: none"> <li>• Application for change of permit to manufacture, import, or sell restricted chemicals/Report of changes (Attached Form No. 21 of Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Documents proving the changes</li> <li>• Original permit</li> </ul>

► **Attention** **Restricted chemicals exempted from permit**

- **Related regulations** Article 20 (3) of the Chemical Substances Control Act and Article 10 of its Enforcement Decree
- **Restricted chemicals exempted from import permit**
  - Reagent for research, experiment, and test (including the standard gas used for calibration/measurement of measuring instrument)

**D. Import report of toxic chemicals**

- Companies intending to import toxic chemicals shall report the type and purpose of chemical to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office. Likewise, those intending to change the reported information shall report the changes within 30 days of the date the changes occurred.

► **Related regulations**

- Article 20 (2), (4) of the Chemical Substances Control Act
- Article 17 (1), (3), (4) of the Enforcement Rules of the above Act

► **Cases requiring reporting of changes**

- Change of type and content of the reported toxic chemical
- Increase of reported quantity to be imported (50% or more)
- Change of purpose of toxic chemical
- Change of company name, name of representative, or location of premises

## 04 Permit/License and obligations for handling hazardous chemicals

### ► Required documents

	Report	Report of changes
Documents	<ul style="list-style-type: none"> <li>• Import report of toxic chemicals (Attached Form No. 23 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Documents proving toxic components</li> </ul>	<ul style="list-style-type: none"> <li>• Report of change of import of toxic chemicals (Attached Form No. 25 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Documents proving the changes</li> <li>• Original import report</li> </ul>

### ► Attention Toxic chemicals exempted from report

► **Related regulations** Article 20 (3) of the Chemical Substances Control Act and Article 10 of its Enforcement Decree

#### ► Toxic chemicals exempted from reporting

- Reagent for research, experiment, and test (including the standard gas used for calibration/measurement of measuring instrument)
- Toxic chemicals not more than 100 kg of which is to be imported per year

## E. Export permit of restricted or prohibited chemicals

• Companies intending to export restricted (meaning purposes with restricted handling) or prohibited chemicals shall obtain an export permit from the chief of the corresponding River Basin Environmental Office or Regional Environmental Office by submitting the information to be included in the export notification on a yearly basis.

They shall also obtain approval for changes in the permit, if any.

### ► Related regulations

- Article 21 (1) of the Chemical Substances Control Act
- Article 18 (1), (4), (5) of the Enforcement Rules of the above Act

### ► Changes requiring approval

	Approval of changes	When to apply
Cases	Change of type and/or content of the chemical with permit	Before the change
	Increase of permitted quantity to be exported (50% or more)	Before the change
	Change of company name, representative, or location of office	Within 30 days of the date the change occurred

► **Required documents**

	Permit	Approval or report of changes
Documents	<ul style="list-style-type: none"> <li>• Application for export permit of restricted/prohibited chemicals (Form 27 of the annex to the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Export notification as per Annex V of the Rotterdam Convention<sup>92)</sup></li> <li>• Safety and health information of the chemical</li> <li>• Warranty of exporter<sup>93)</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Approval of changes in the export permit of restricted/prohibited chemicals (Attached Form No. 29 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Documents proving the changes</li> <li>• Original export permit</li> </ul>

## 05 Installing and operating facilities for handling hazardous chemicals

### A. Filing an offsite risk assessment report

- Companies intending to install/operate facilities<sup>94)</sup> for handling hazardous chemicals shall prepare and submit an offsite risk assessment report (“ORAR” hereinafter) to the president of the National Institute of Chemical Safety, which preemptively assesses the influences on local residents and environment in the area where a chemical accident occurs.

The preparation of this ORAR can be commissioned to the organization<sup>95)</sup> specializing in such preparation processes.

92) The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade is a multilateral treaty to promote shared responsibilities in relation to the import of hazardous chemicals; it promotes open exchange of information and calls on exporters of hazardous chemicals to use proper labeling, includes directions on safe handling, and informs purchasers of any known restrictions or bans.

93) If the chemical is one determined by Annex III of the Rotterdam Convention, only the warranty of the exporter is required.

94) Laboratories as per Article 2, Subparagraph 2 of the Act on the Establishment of Safe Laboratory Environment are excluded; the same shall apply hereinafter

95) Organizations designated/announced as per Article 23-2 of the Chemical Substances Control Act

## 04 Permit/License and obligations for handling hazardous chemicals

### ▶ Related regulations

- Article 23 (1), (4) of the Chemical Substances Control Act
- Article 19 (1), (3) of the Enforcement Rules of the Chemical Substances Control Act

### ▶ Cases requiring ORAR

- If the applicant intends to install/operate facilities for handling hazardous chemicals
- The range of influence on local residents and environment from a chemical accident is expanded due to any of the following cases:
  - Additional handling facilities are installed in the same premises
  - The current handling facilities are to be moved due to the boundaries of the premises
  - The hazardous chemical to handle is to be changed

### ▶ Required documents

- Application for review of ORAR (Attached Form No. 31 of the Enforcement Rules of the Chemical Substances Control Act)
- ORAR<sup>96)</sup>

### <Note> Cases requiring simplified ORAR

- ▶ **Related regulations** Article 19 (3) of the Enforcement Rules of the Chemical Substances Control Act
- ▶ If the facilities are smaller than what the Minister of Environment announced, and the influence of a chemical accident on the local residents and environment is deemed negligible, the ORAR may be filed by citing Subparagraph 1, Item a, b and Subparagraph 3 of Attached Table No. 4 of the Enforcement Rules of the Chemical Substances Control Act.

## B. Compliance with the criteria for placing, installing, and managing hazardous chemical-handling facilities

- Hazardous chemical-handling facilities shall be installed and operated as per the criteria for placing, installing, and managing hazardous chemical-handling facilities.specializing in such preparation processes.

### ▶ Related regulations

- Article 24 (1) of the Chemical Substances Control Act

96) Refer to Article 19 (2) and Attached Table No. 4 of the Enforcement Rules of the Chemical Substances Control Act on how to prepare the ORAR.

○ Article 21 (1) of the Enforcement Rules of the Chemical Substances Control Act

▶ **Criteria for placing hazardous chemical-handling facilities**

○ The facilities shall be installed such that the safe distance announced<sup>97)</sup> by the Minister of Environment is maintained from the wall or boundaries of the structure to the boundaries of the natural environment/landscape protection area.

▶ **Criteria for installing and managing hazardous chemical-handling facilities**

○ Refer to Article 21 (2) and Attached Table No. 5 of the Enforcement Rules of the Chemical Substances Control Act.

▶ **Attention**

**Special exemption from the criteria for placing, installing, and managing hazardous chemical-handling facilities**

▶ **Related regulations** Article 21-2 (1), (2) of the Enforcement Rules of the Chemical Substances Control Act

▶ **Facilities entitled to the special exemption**

○ The president of the National Institute of Chemical Safety shall conduct safety assessment on the facilities deemed to have difficulty in applying the criteria for placing, installing, and managing hazardous chemical-handling facilities in any of the following cases and determine that some of the criteria may not be applied or applied in a different manner depending on the result:

- If the hazardous chemical-handling facilities have an unavoidable need for large-scale moving or any safety concerns due to lack of physical space for installation/management to comply with the criteria for installing and managing the facilities, as its construction work started before December 31, 2014
- If the president of the National Institute of Chemical Safety acknowledges that there are some difficulties in applying the criteria for installing and managing the handling facilities due to the new criteria for installing the handling facilities

▶ **How to apply for safety assessment**

○ Companies intending to apply for safety assessment for their hazardous chemical-handling facilities shall fill out and submit the safety assessment application (Attached Form No. 5 of the Enforcement Rules of the Chemical Substances Control Act) to the president of the National Institute of Chemical Safety along with the required documents.

97) Announcement of safety distance from the wall or boundaries of hazardous chemical-handling facilities to the object of protection (Ministry of Environment Announcement No. 2018-23)

### C. Inspection of hazardous chemical-handling facilities

- Hazardous chemical-handling facilities that completed installation work shall be inspected by the inspection agency<sup>98)</sup>, and the results shall be submitted to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office. Companies installing/operating hazardous chemical-handling facilities shall have the facilities inspected on a regular or a random basis, with the results to be submitted to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office.

#### ▶ Related regulations

- Article 24 (2), (3) of the Chemical Substances Control Act
- Article 23 (1)-(6) of the Enforcement Rules of the Chemical Substances Control Act
- Article 6 (3) of the Regulations on the Installation and Regular/Random Inspection and Safety Diagnosis of Hazardous Chemical-handling Facilities (Ministry of Environment Announcement No. 2019-157)

#### ▶ Type and time of inspection

	Installation inspection	Regular inspection	Random inspection
Time of inspection	<ul style="list-style-type: none"> <li>• Before the operation of the facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Companies required to obtain a sales permit for hazardous chemicals: 30 days before and after the day when 1 year has passed from the inspection date in the installation inspection report</li> <li>• Companies NOT required to obtain a sales permit for hazardous chemicals: 30 days before and after the day when 2 years have passed from the inspection date in the installation inspection report</li> <li>• If safety diagnosis is conducted                             <ul style="list-style-type: none"> <li>- Companies required to obtain a sales permit for hazardous chemicals: 30 days before and after the day when 1 year has passed from the date of the last safety diagnosis</li> <li>- Companies NOT required to obtain a sales permit for hazardous chemicals: 30 days before and after the day when 2 years have passed from the date of the last safety diagnosis</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Within 7 days of the date of chemical accident</li> <li>• If the company has been notified by the chief of the corresponding River Basin Environmental Office or Regional Environmental Office that they are required to undergo random inspection due to concerns of chemical accident</li> </ul>

98) Organizations determined as per Article 22 (1) of the Enforcement Rules of the Chemical Substances Control Act

► **Required documents**

	Installation inspection	Regular inspection	Random inspection
Documents	<ul style="list-style-type: none"> <li>• Safety report of hazardous chemical-handling facilities (Attached Form No. 34 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Inspection report of handling facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Regular inspection report of hazardous chemical-handling facilities (Attached Form No. 36 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Inspection report of handling facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Random inspection report of hazardous chemical-handling facilities (Attached Form No. 36 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Inspection report of handling facilities</li> </ul>

**D. Safety diagnosis of hazardous chemical-handling facilities**

- Companies installing/operating hazardous chemical-handling facilities or completing the installation of such facilities and which are required to undergo safety diagnosis shall have an inspection agency<sup>99)</sup> conduct the safety diagnosis and shall submit the results to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office in order to verify the safety of the facilities.

► **Related regulations**

- Article 24 (4) of the Chemical Substances Control Act
- Article 21 (1)-(4) of the Enforcement Rules of the Chemical Substances Control Act

► **Cases requiring safety diagnosis**

- If it is deemed that there are safety concerns due to erosion, cracks, and/or corrosion of the structure/equipment of the facilities found from the installation or regular or random inspection: Within 20 days of the date of such inspection
- If a certain period elapsed after installing the hazardous chemical-handling facilities based on the risk of the facilities identified in the review report of the ORAR:
  - High-risk hazardous chemical-handling facilities: Every four years from the date the review report of the ORAR is received (within 60 days of expiry)
  - Medium-risk hazardous chemical-handling facilities: Every eight years from the date the review report of the ORAR is received (within 60 days of expiry)
  - Low-risk hazardous chemical-handling facilities: Every 12 years from the date the review report of the ORAR is received (within 60 days of expiry)
  - If there is no review of the risk of the facilities: Every four years (within 60 days of expiry)

99) Organizations determined as per Article 22 (1) of the Enforcement Rules of the Chemical Substances Control Act

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### ▶ Required documents

- Safety diagnosis report of hazardous chemical-handling facilities (Attached Form No. 37 of the Enforcement Rules of the Chemical Substances Control Act)
- Statement of safety diagnosis result of hazardous chemical-handling facilities

## E. In-house inspection and recordkeeping

- Companies installing/operating<sup>100)</sup> hazardous chemical-handling facilities shall conduct their own in-house inspection on the facilities, equipment, etc. at least once a week and keep the results for five years.

### ▶ Required documents

- Article 26 (1) of the Chemical Substances Control Act
- Article 26 (1) of the Enforcement Rules of the Chemical Substances Control Act

### ▶ Details of in-house inspections

- Refer to Article 26 (2) of the Chemical Substances Control Act and Article 26 (2) of its Enforcement Rules

### ▶ Recordkeeping method

- Utilize the in-house inspection logbook of hazardous chemical-handling facilities (Attached Form No. 42 of the Enforcement Rules of the Chemical Substances Control Act)
- The logbook shall be kept in an area where the officer handling hazardous chemicals can access it with ease.

## 06 Sales permit for hazardous chemicals

### A. Filing an offsite risk assessment report

- Companies intending to offer hazardous chemicals commercially shall be equipped with appropriate handling facilities/equipment and technical personnel for the chemicals to be sold and obtain approval from the chief of the corresponding River Basin Environmental Office or Regional Environmental Office depending on their type of business.

100) Including suspension of operation of temporary closure

### ► Required documents

- Article 27, Article 28 (2) of the Chemical Substances Control Act
- Article 27 (1), (3) and Attached Table No. 6 of the Enforcement Rules of the Chemical Substances Control Act

### ► Category of sales of hazardous chemicals

Sales of hazardous chemicals other than permitted and prohibited chemicals

- Manufacturing business of hazardous chemicals: Activity of manufacturing and selling hazardous chemicals other than permitted and prohibited chemicals for selling the chemicals
- Sales business of hazardous chemicals: Activity of selling hazardous chemicals other than permitted and prohibited chemicals for commercial gain
- Storage business of hazardous chemicals: Activity of storing hazardous chemicals other than permitted and prohibited chemicals for purposes such as manufacturing, using, selling, and transporting
- Transportation business of hazardous chemicals: Activity of transporting (excluding transportation with aircraft, ship, or train) hazardous chemicals other than permitted and prohibited chemicals
- Business of utilizing hazardous chemicals: Activity of utilizing hazardous chemicals other than permitted and prohibited chemicals in the process of manufacturing a product or conducting tasks such as cleaning or painting

### ► Required documents

- Application for sales permit for hazardous chemicals (Attached Form No. 43 of the Enforcement Rules of the Chemical Substances Control Act)
- ORAR with notification of appropriateness of installing/operating hazardous chemical-handling facilities (if such facilities are to be installed/operated)
- Inspection report notification of appropriateness for the hazardous chemical-handling facilities (if such facilities are to be installed/operated)
- Risk management plan with notification of appropriateness, if handling accident-prone chemicals
- Information such as annual quantity to handle (Attached Form No. 44 of the Enforcement Rules of the Chemical Substances Control Act)
- Statement of installation of hazardous chemical-handling facilities (area and capacity per facility, location, layout, arrangement plan, etc.)
- List of equipment and technical personnel to handle hazardous chemicals
- A copy of transportation business permit utilizing freight truck (for transportation business)
- One of the following to prove that the company does not have any reason for

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disqualification (if the business owner is not from Korea):

- Documents issued by the government or other relevant authorities
- Applicant's statement notarized and confirmed by the Korean consulate in the corresponding country
- Private document verified by the consulate of the corresponding country in Korea or equivalent document

### <Note> Reasons for disqualification for sales permit for hazardous chemicals

▶ **Related regulations** Article 30 of the Chemical Substances Control Act

▶ **Reasons for disqualification**

- Those with guardianship of incapacitated or disabled persons
- Those declared bankrupt but not reinstated
- Those sentenced with punishment harsher than imprisonment for violation of the Chemical Substances Control Act, and not more than two years have passed without the enforcement being (or considered) complete or the sentence confirmed not to be enforced
- A legal person with one of the cases above and belonging to the board of directors
- Those whose date of revocation of license was within the past two years

### ▶ **Attention** Exemption from sales permit for hazardous chemicals

▶ **Related regulations** Article 29 of the Chemical Substances Control Act and Article 31 of its Enforcement Rules

▶ **Cases qualifying for exemption**

- Those engaging in the business of selling, storing, transporting, or using hazardous chemicals contained inside machinery or equipment
- Those engaging in the business of selling<sup>101)</sup>, storing, transporting, or using reagent for research, experiment, or test corresponding to hazardous chemicals for such purposes
- Those engaging in the business of unloading or transporting hazardous chemicals

101) Those intending to engage in sales of reagent for test, experiment, or research corresponding to hazardous chemicals shall report such activity to the Minister of Environment (Article 29-3 (1) of the Chemical Substances Control Act)

in certain areas such as port or train stations

- Those engaging in the business of transporting 1 ton or less of hazardous chemicals at one time
- Those using any hazardous chemical, excluding accident-prone chemicals, at a yearly quantity of 120 tons or less in the premises outside of the water source conservation area. If the premises are located in a special measure area, however, the yearly quantity shall be 60 tons or less; if the location is an urban design district (excluding those designated for residential area) or an exclusive industrial area, the yearly quantity shall be 240 tons or less
- Those using restricted chemicals (excluding accident-prone chemicals) at a yearly quantity of 60 tons or less in the premises located outside the water source conservation area or special measure area
- Those using accident-prone chemicals (not toxic ones) and corresponding to all of the following (those using such chemicals in a water source conservation area or a special measure area are excluded, however):
  - Those required to submit the ORAR<sup>102)</sup>
  - Those required to submit the risk management plan
- Those with a permit to manufacture or use the chemicals requiring permit as per Article 38 (1) of the Occupational Safety and Health Act but not required to file the ORAR or risk management plan
- Those opening a pharmacy or engaging in the business of sales of medicine and offering hazardous chemicals for domestic purposes
- Those acknowledged by the Minister of Environment as not requiring a sales permit for hazardous chemicals and announced as such<sup>103)</sup>

## B. Approval or report of changes of sales permit for hazardous chemicals

- Those intending to change the details of the sales permit for hazardous chemicals shall obtain approval for the changes or report the changes.
- Those intending to obtain approval for changes or report the changes shall submit the required documents to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office.

102) Some items to be excluded from the designated items as per Article 19 (3) of the Enforcement Rules of the Chemical Substances Control Act may be omitted

103) Regulations on exemption from sales permit for hazardous chemicals (Ministry of Environment Announcement No. 2018-246)

## 04 Permit/License and obligations for handling hazardous chemicals

► **Related regulations** Article 28 (5) of the Act on the Registration, Evaluation, etc. of Chemicals and Article 29 (1), (2) of its Enforcement Rules

► **Changes requiring approval or report**

	Changes requiring approval or report	When to apply/report
Approval	Increase of total capacity of storage or transportation facilities per business (50% or more)	Before the change
	Increase of yearly quantity of manufacture or use (50% or more)	Before the change
	Addition of hazardous chemicals with permit <sup>104)</sup>	Before the change
	Changes of offsite assessment information in the ORAR (If the influence from potential chemical accidents on the local residents or environment will be expanded due to reasons such as addition of handling facilities in the same premises, moving the facilities due to the boundary issue of premises, or substitution of hazardous chemical to be handled <sup>105)</sup> )	Before the change
	Change of location of premises (excluding those with an office only)	Before the change
Report	Change of company name, representative, or location of office	Within 30 days of the date of changes
	Changes of offsite assessment information in the ORAR, such as substitution of hazardous chemicals to be handled or if they are used for pilot manufacturing only, which shall last for not longer than 60 days	Before the change
	Changes of offsite assessment information in the ORAR, but the influence from a potential chemical accident on the local residents or environment will not be expanded (only if the grounds are one of the following: addition of handling facilities in the same premises, moving the facilities due to the boundary issue of premises or substitution of the hazardous chemical to be handled)	Within 30 days of the date of changes

104) Changes of offsite assessment information in the ORAR, such as substitution of hazardous chemicals to be handled or if they are used for pilot manufacturing only, which shall last for not longer than 60 days, are excluded

105) Changes of offsite assessment information in the ORAR, such as substitution of hazardous chemicals to be handled or if they are used for pilot manufacturing only, which shall last for not longer than 60 days, are excluded

	Changes requiring approval or report	When to apply/report
Report	Change of the type of vehicle transporting hazardous chemicals, or if the number of such vehicles or their capacity increases	Within 30 days of the date of changes
	Change of technical personnel	Within 60 days of the date of changes

► **Required documents**

	Approval of changes	Report of changes
Documents	<ul style="list-style-type: none"> <li>• Application for approval of changes in the sales permit for hazardous chemicals (Attached Form No. 46 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Documents that can prove the changes</li> <li>• Original sales permit for hazardous chemicals</li> <li>• Changed ORAR and risk management plan (If hazardous chemicals with permit are added, but the range of influence from a potential chemical accident on the local residents and environment is not expanded, the changed ORAR may be replaced with the review report of changes of information in the ORAR.)</li> </ul>	<ul style="list-style-type: none"> <li>• Report of changes in the sales permit for hazardous chemicals (Attached Form No. 46 of the Enforcement Rules of the Chemical Substances Control Act)</li> <li>• Documents that can prove the changes</li> <li>• Original sales permit for hazardous chemicals</li> <li>• Pilot manufacturing plan (if chemicals are to be used for pilot manufacturing)</li> <li>• Review report of changes of information in the ORAR confirmed by the company engaging in the business of sales of hazardous chemicals or the organization that prepared the original ORAR (if the range of influence from a potential chemical accident on the local residents and environment is not expanded)</li> </ul>

**C. Report of commissioned handling of hazardous chemicals**

- If the company engaging in the business of sales of hazardous chemicals commissions the handling activity (including outsourcing), the subcontractor shall report the fact of commissioning to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office together with the required document prior to starting the commissioned task<sup>106)</sup>.

106) If the company engaging in the business of sales of hazardous chemicals commissions the handling activity (including outsourcing), the subcontractor shall report the fact of commissioning to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office together with the required document prior to starting the commissioned task

## 04 Permit/License and obligations for handling hazardous chemicals

### ► Required documents

- Article 31 (1), (3), (4) of the Chemical Substances Control Act
- Article 32 (1)-(3) of the Enforcement Rules of the Chemical Substances Control Act

### ► Obligations of the subcontractor

- The commissioning company shall commission the handling task to the company with the qualifications, criteria, and capability to handle hazardous chemicals properly as follows:
  - Has a full array of required personal protective equipment (PPE)
  - Complies with the criteria for placing, installing, and managing hazardous chemical-handling facilities
  - Took the hazardous chemicals safety training
- The commissioning company shall manage and supervise the subcontractor without overburdening them with excessive demands such as:
  - Shortening the period of construction/repair as determined in the commissioning contract
  - Construction/Repair work at nighttime – Such works may be accepted when required urgently to prevent chemical accidents
  - Demand for construction, repair, or operation of the facilities despite the subcontractor's legitimate request to stop working due to concerns of chemical accident
  - Hiding the fact or likelihood of chemical accident
  - Other cases announced by the Minister of Environment as deemed necessary for the safety control of hazardous chemicals

### ► Required documents

- Report of commissioning of hazardous chemicals handling (Attached Form 48 of the Enforcement Rules of the Chemical Substances Control Act)
- Information regarding the main products and revenue of the applicant, commissioning company, and subcontractor
- Commissioning plan (Outline of tasks to be commissioned, reasons for commissioning, list of PPE owned by the subcontractor, list of facilities and personnel of subcontractor, evidentiary documents proving the capabilities and criteria required of the subcontractor)
- Safety management plan for chemical accident
- Statement of reasons for urgent commissioning (if commissioned tasks were conducted urgently)

## D. Designation of hazardous chemicals officer

- Companies engaging in the business of sales of hazardous chemicals shall designate<sup>107)</sup> a hazardous chemicals officer prior to starting their business based on the quantity of hazardous chemicals to handle and number of employees, in order to ensure the safety of the hazardous chemical-handling facilities and prevent risks from the hazardous chemicals.

▶ **Related regulations** Article 32 (1) of the Chemical Substances Control Act, Article 2 (1), (2) of its Enforcement Decree, and Article 33 of its Enforcement Rules, Regulations on the qualifications of hazardous chemicals officer (Ministry of Environment Announcement No. 2018-23)

### ▶ Criteria for designating hazardous chemicals officers and their qualifications

		Detailed criteria																				
Appointment Criteria	Personnel		No. of personnel																			
	Hazardous chemicals officer (HCO)	—	1 (If the company has fewer than 10 employees, the hazardous chemicals control inspector may be designated as HCO, too)																			
		Transportation	1 HCCI per 20 vehicles ※ Exempted if there are 20 vehicles or less																			
Hazardous chemicals control inspector (HCCI)	Other business	<table border="1"> <thead> <tr> <th rowspan="2">Number</th> <th colspan="5">Yearly quantity of hazardous chemical to be handled</th> </tr> <tr> <th>&lt;1,000 tons</th> <th>&lt;10,000 tons</th> <th>&lt;100,000 tons</th> <th>&lt;1 m tons</th> <th>≥ 1 m tons</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </tbody> </table>					Number	Yearly quantity of hazardous chemical to be handled					<1,000 tons	<10,000 tons	<100,000 tons	<1 m tons	≥ 1 m tons	1	2	3	4	5
		Number	Yearly quantity of hazardous chemical to be handled																			
<1,000 tons	<10,000 tons		<100,000 tons	<1 m tons	≥ 1 m tons																	
1	2	3	4	5																		
※ The following businesses require more HCCIs: ▶ Manufacture, storage, sales (excluding those without handling facilities): One additional HCCI per 500 employees ▶ Users: One additional HCCI per 5,000 employees																						
Qualifications	<ul style="list-style-type: none"> <li>• The following certificates: Fire and marine safety technician, fire technician, gas technician, atmospheric administration technician, water quality management technician, waste disposal technician, or industrial hygiene management technician</li> <li>• The following certificates: Fossil engineer, industrial safety engineer, gas engineer, water quality engineer, atmospheric recovery engineer, waste disposal engineer, or industrial hygiene control engineer</li> </ul>																					

107) If the management of hazardous chemicals is to be commissioned to a subcontractor, the subcontractor shall designate the hazardous chemicals officer (Article 32 (2) of the Chemical Substances Control Act)

## 04 Permit/License and obligations for handling hazardous chemicals

	Detailed criteria
Qualifications	<ul style="list-style-type: none"> <li>• The following certificates: Industrial safety industry engineer, water quality environment industry engineer, atmospheric environment industry engineer, waste disposal industry engineer, hazardous materials industry engineer, gas industry engineer, or industrial hygiene management industry engineer</li> <li>• The following certificates: Gas licensed technician, environment licensed technician, or hazardous material licensed technician</li> <li>• Majored in chemistry-related subjects in 2-year college or higher and received at least 32 hours of hazardous chemicals safety training</li> <li>• Graduate of industrial high schools or specialized high schools, with major related to chemistry and received at least 32 hours of hazardous chemicals safety training</li> <li>• Work experience of at least three years at a site handling chemicals and at least 32 hours of hazardous chemicals safety training</li> <li>• Certificate of gas master or hazardous chemicals master</li> <li>• Certificate of engineer handling toxic materials</li> <li>• At least eight hours of hazardous chemicals safety training for the business of sales of hazardous chemicals without handling facilities</li> </ul>

### <Note> Report of designation of a hazardous chemicals officer

- Companies designating or dismissing a hazardous chemicals officer (HCO) or those whose HCO has retired shall immediately report the fact to the chief of the corresponding River Basin Environmental Office or Regional Environmental Office and designate a new HCO within 30 days of such dismissal or retirement, but such period may be extended upon the approval of the chief of the corresponding River Basin Environmental Office or Regional Environmental Office if there are difficulties in finding a new HCO (Article 32 (3) of the Chemical Substances Control Act and Article 34 (1) of its Enforcement Rules).

### ▶ Attention Approval of joint utilization of hazardous chemical-handling facilities

#### ▶ Related regulations

- Article 38 (1) of the Chemical Substances Control Act
- Article 42 (1) of the Enforcement Rules of the Chemical Substances Control Act

#### ▶ Description

- Multiple companies engaging in the business of hazardous chemicals with business places in the same site or building may jointly utilize the hazardous

chemical-handling facilities or the HCO upon approval of the chief of the corresponding River Basin Environmental Office or Regional Environmental Office.

► **Required documents**

- Application for joint utilization of hazardous chemical-handling facilities/ utilization officer (Attached Form No. 57 of the Chemical Substances Control Act)
- Plan of joint utilization
- List of facilities and equipment related to hazardous chemicals per company
- List of companies and their addresses
- Agreement of all companies regarding the obligations and rights related to the control of hazardous chemicals
- List of designated hazardous chemicals officers and their substitute in case of emergency per company

## 07 Hazardous chemicals safety training

- Technical personnel as well as the hazardous chemicals officer of a company with sales permit for hazardous chemicals shall complete the hazardous chemicals safety training provided by the safety training organization.

► **Related regulations**

- Article 33 (1) of the Chemical Substances Control Act
- Article 13 of the Enforcement Decree of the Chemical Substances Control Act
- Article 37 (1) and Attached Table No. 6-2 of the Enforcement Rules of the Chemical Substances Control Act
- Regulations on hazardous chemicals officer (Ministry of Environment Announcement No. 2018-247)

► **Required training hours per personnel**

Personnel	Training hours
Technical personnel of companies with sales permit for hazardous chemicals	16 hours per 2 years

## 04 Permit/License and obligations for handling hazardous chemicals

	Personnel	Training hours
Hazardous chemicals officer	Sales (with no handling facilities)	8 hours per 2 years
	Other sales	16 hours per 2 years
Hazardous chemicals handling personnel	Personnel directly handling hazardous chemicals among those hired by the company engaging in the business of sales of hazardous chemicals	16 hours per 2 years (8 hours per 2 years for transporter)
	Subcontractor and personnel directly handling hazardous chemicals among those hired by the subcontractor	16 hours per 2 years (8 hours per 2 years for transporter)
	Personnel in charge of preparing the risk management plan	16 hours per 2 years
	Personnel in charge of preparing the ORAR	16 hours per 2 years

- Companies engaging in the business of hazardous chemicals shall ensure that all of their employees<sup>108)</sup> take at least one training session lasting at least two hours of hazardous chemicals safety training provided by a safety training organization or the hazardous chemicals officer, including online training.

### ► Related regulations

- Article 33 (3) of the Chemical Substances Control Act
- Article 37 (4) of the Enforcement Rules of the Chemical Substances Control Act

### <Note> Hazardous chemicals safety training organizations

- **Related regulations** Article 33 (1) of the Chemical Substances Control Act and Article 35 (1) of its Enforcement Rules
- **Safety training organizations**
  - National Institute of Chemical Safety
  - Associations related to the control of chemicals

108) Those taking safety training as per Article 33 (1) of the Chemical Substances Control Act or those designated by the Minister of Environment are excluded.

- Other specialized organizations announced<sup>109)</sup> by the president of the National Institute of Chemical Safety as those capable of providing safety training based on the professional capability assessment on their safety training

## 08 Obligations for handling accident-prone chemicals

### A. Compliance with the management criteria of accident-prone chemicals

- Companies engaging in handling<sup>110)</sup> accident-prone chemicals shall comply with the management criteria of accident-prone chemicals, such as recordkeeping of entry or exit by non-employees.

#### ▶ Related regulations

- Article 40 of the Chemical Substances Control Act
- Article 44 and Attached Table No. 9 of the Enforcement Rules of the Chemical Substances Control Act

### B. Filing a risk management plan

- Companies engaging in handling more than a certain quantity<sup>111)</sup> of accident-prone chemicals shall file the risk management plan with the president of the National Institute of Chemical Safety every five years<sup>112)</sup>  
Any changes in the plan shall also be submitted in the form of a revised risk management plan.

109) Designation of specialized hazardous chemicals safety training organizations (National Institute of Chemical Safety Announcement No. 2019-3)

110) Cases wherein the handling facility is the laboratory as per Article 2, Subparagraph 2 of the Act on the Establishment of Safe Laboratory Environment are excluded; the same shall apply hereinafter

111) Defined in Article 45 and Attached Table No. 10 of the Enforcement Rules of the Chemical Substance Control Act

112) Where intending operate a business involving hazardous chemical substances, submit in advance (Article 41 (2) of the Chemical Substance Control Act)

## 04 Permit/License and obligations for handling hazardous chemicals

### ▶ Related regulations

- Article 41 (1), (3) of the Chemical Substances Control Act
- Article 46 (1) of the Enforcement Rules of the Chemical Substances Control Act

### ▶ Cases requiring the filing of a revised risk management plan

- Important changes<sup>113)</sup> requiring approval of changes in the sales permit for hazardous chemicals, such as increase of quantity to be handled or capacity of handling facilities, or movement of the facilities
- Cases where the head of a local government having jurisdiction over the location of the place of business has requested the complement of a plan for dispersion or residents, where the Minister of Environment has notified the submitter to submit a modified plan recognizing the necessity thereof

### ▶ Required documents

- Application for review of risk management plan (Attached Form No. 59 of the Enforcement Rules of the Chemical Substances Control Act)
- Risk management plan

## C. Notification of risk management plan to the local community

- Companies receiving notification that their (revised) risk management plan is appropriate shall provide a summary<sup>114)</sup> of the risk of chemical accident and emergency measures to the local residents in the area where the premises are located within three months of receiving such notification and shall do the same at least once a year thereafter.
- If such notification is revised, they shall notify the changes within one month of the date of revision.

### ▶ Related regulations

- Article 42 (1), (2) of the Chemical Substances Control Act
- Article 48 (1), (3) of the Enforcement Rules of the Chemical Substances Control Act

### ▶ Matters to be notified to the local community

- Hazards of hazardous chemicals handled by the companies and risk of chemical accident

113) Article 46 (4) of the Enforcement Rules of the Chemical Substances Control Act

114) Attached Form No. 62 of the Chemical Substances Control Act

- Range of influence such as air, water, groundwater, land, natural environment, etc. in case of chemical accident
- Method of delivering an early alert in case of chemical accident and guidelines including evacuation
- ▶ **Notification method** This notification shall be made in one of the following methods by an individual company or jointly by multiple companies:
  - Written notification: Post or email
  - Explanation to the individual residents: Each resident shall sign the confirmation of explanation after hearing it
  - Collective notification: Public hearing or briefing session
  - Others: Articles on daily newspaper, posting on the website of the corresponding local government, or announcement by the administration center of apartment complex or local community service center, etc.

## 09 Measures in case of chemical accidents

- If any chemical accident occurs or there are concerns of one, companies handling hazardous chemicals shall immediately take emergency measures to prevent risks as per the risk management plan. Likewise, operation of the handling facilities shall be suspended depending on the urgency and severity of the accident.
- In case of chemical accidents, the companies involved shall immediately report the fact to the corresponding River Basin Environmental Office or Regional Environmental Office, national police, firefighting service, or local labor administration office as per the predetermined criteria based on the quantity of leak and type of accident.

### ▶ Related regulations

- Article 43 (1), (2) of the Chemical Substances Control Act
- Article 49 (1) of the Enforcement Rules of the Chemical Substances Control Act

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Promotion Agency

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