

# Structure of the Soil Contamination Countermeasures Act



## **NOTICE TO USERS**

The explanations contained in this pamphlet are not official texts. Only the original Japanese texts of the laws and regulations have legal effect, and this pamphlet is to be used solely as reference materials to aid in the understanding of Japanese laws and regulations. The Ministry of the Environment, Japan, and the Japan Environment Association are not responsible for the accuracy, reliability or currency of the legislative material provided in this pamphlet, or for any consequence resulting from use of the information in this pamphlet. For all purposes of interpreting and applying law to any legal issue or dispute, users should consult the original Japanese texts published in the Official Gazette.

# Structure of the Soil Contamination Countermeasures Act

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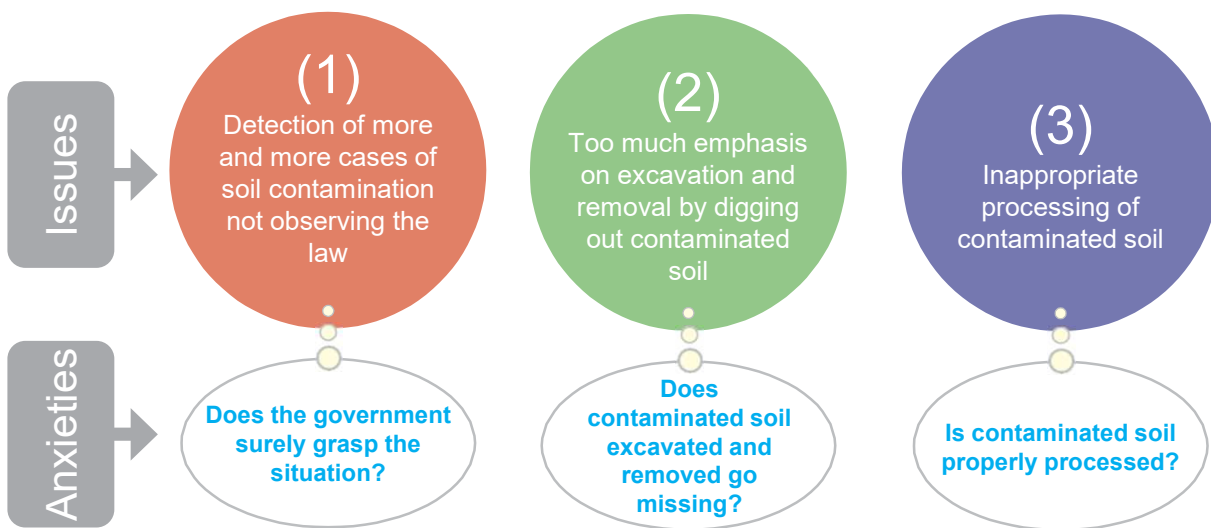
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# 1

# Introduction

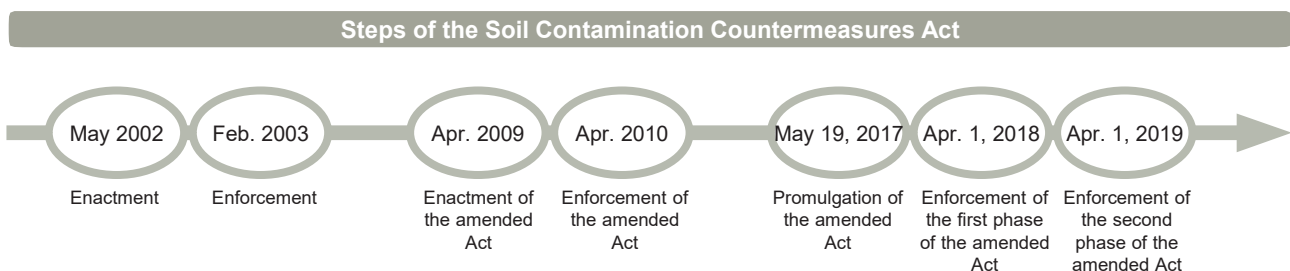
This pamphlet explains the viewpoint and the structure of the Soil Contamination Countermeasures Act (Act No. 53 of 2002). The Soil Contamination Countermeasures Act is a law that sets forth investigations to find soil contamination of land and the manner to properly manage land with soil contamination to prevent harmful effects on our health caused by such detected contamination.

The enactment of the Soil Contamination Countermeasures Act in 2002 has raised people’s awareness of soil contamination and has revealed various issues.



Accordingly, to solve these issues, with the aim of (1) expanding the scope of reasons for investigations, (2) deepening understanding on the viewpoint of health risk, and (3) ensuring proper processing of contaminated soil, the amended Soil Contamination Countermeasures Act was enacted in April 2009, and entered into force in April 2010.

Then, the enforcement status and review of this Act were examined, and in order to promote proper risk management with regard to soil contamination, the Act Partially Amending the Soil Contamination Countermeasures Act was promulgated on May 19, 2017; the first phase of the law entered into force on April, 1, 2018 and the second phase entered into force on April, 1, 2019.



# 2

# What is soil contamination?

Soil is indispensable for living things including us, human beings, to survive just like water and air. Soil is the place of life for living things under the ground, and water and nutrient elements contained in soil allow the agricultural crops that we eat to grow.

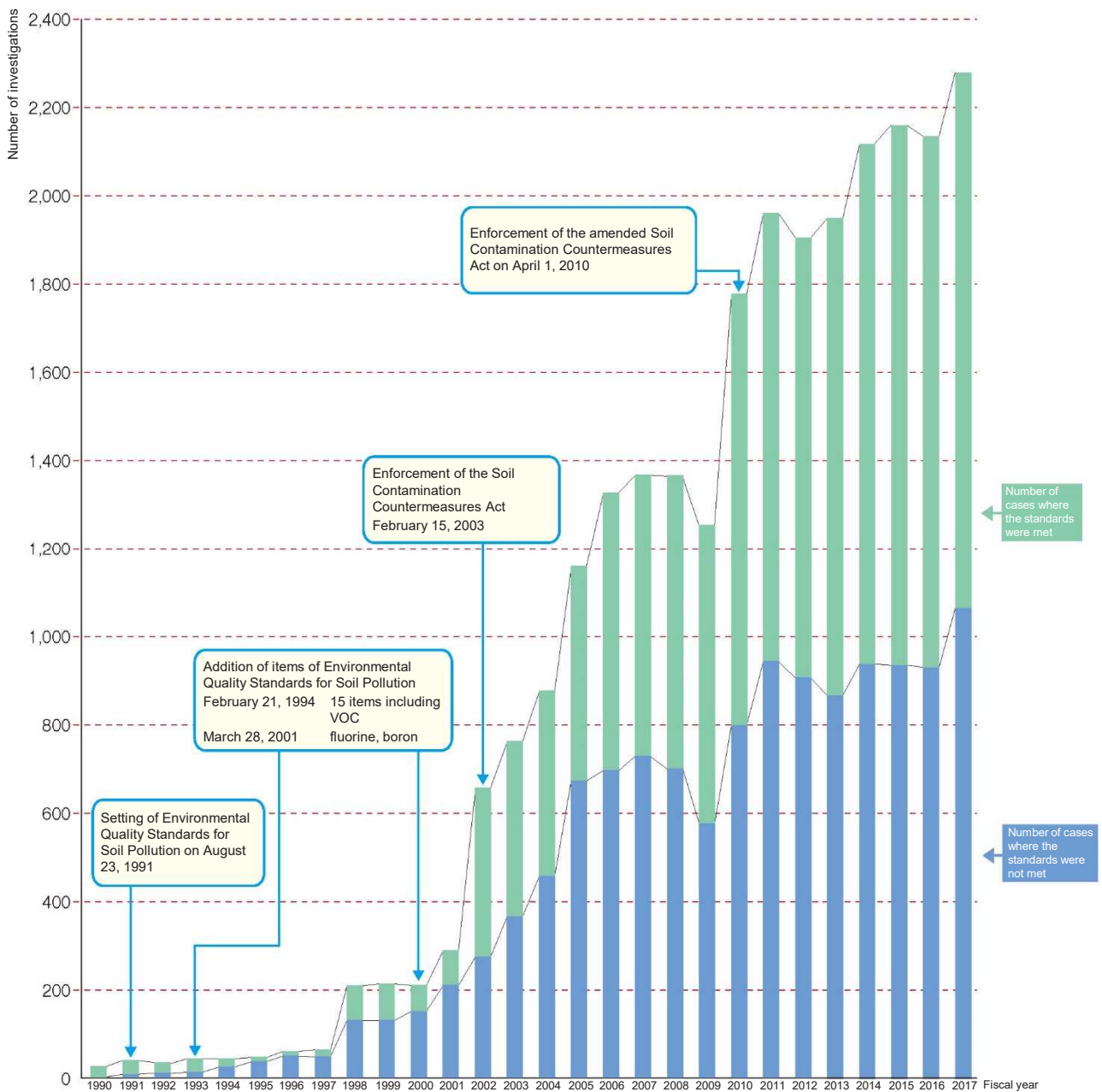
Soil contamination is the situation where soil that plays such roles has been contaminated by substances harmful to human beings. Contamination is possibly caused by inappropriately handling hazardous substances to be used as raw materials and allowing liquid that contains hazardous substances to seep into the ground in the course of factory operation. In addition, soil contamination includes not only contamination caused in association with human activities but also contamination coming from nature.



Hazardous substances produced in association with human activities, etc. has stayed in soil.

The number of investigations into soil contamination grasped by prefectural governments, etc. is increasing year by year, and the number of cases where soil contamination is found is also increasing.

### Number of cases where soil contamination was found by year



(Source) "Results of the survey on the enforcement status of the Soil Contamination Countermeasures Act and Soil Contamination Investigations and Countermeasures in FY 2017"

# 3

# Risk of soil contamination

The presence of soil contamination does not necessarily have an immediate harmful effect on our health. The Soil Contamination Countermeasures Act views health risks caused by soil contamination based on the following two cases:

## (1) Risk of intake through groundwater, etc.

Risk caused by the case where hazardous substances contained in soil elute into the groundwater and groundwater that contains the hazardous substances is drunk

**Example** Cases where there are wells or water taps to drink groundwater around land with soil contamination.



## (2) Risk of direct intake

Risk caused by intake of hazardous substances contained in soil directly from the mouth or skin, etc.

**Example** When children are playing in a sandbox, soil on their hands enters their mouths or soil blown by the wind directly enters their mouths.



The Soil Contamination Countermeasures Act was established in order to properly manage these health risks. This Act sets forth (1) the standards on the amount of elution from soil (soil leachate standards) with regard to all specified hazardous substances in terms of risk of intake through groundwater, etc. and (2) the standards on the content in soil (soil content standards) with regard to nine substances of specified hazardous substances in terms of risk of direct intake. (See “8. Related materials” on page 23.)

Issues related to soil contamination are not the presence of soil contamination itself but the presence of routes (intake routes) through which hazardous substances contained in soil enter our body. By taking measures to block such routes, health risks caused by soil contamination can be reduced as hazardous substances do not enter our body. In other words, if intake routes are blocked and health risks are properly managed, the presence of soil contamination does not affect our health at all.



# Summary of the Soil Contamination Countermeasures Act

## Purpose

The purpose is to facilitate the implementation of countermeasures against soil contamination by formulating measures to grasp the situation of soil contamination and measures to prevent harm to human health resulting from such contamination, and thereby to protect the health of the citizens.

## System

### Investigation

**(1) When the use of specified facilities using hazardous substances is ceased (Article 3 of the Act)**

- When operation is continued, investigations can be temporarily exempted (proviso of Article 3, paragraph (1) of the Act)
- Changes to the form or nature of land with an area of more than or equal to 900 square meters that is subject to temporary exemption of investigations should be notified, and soil contamination investigations should be conducted under the order of the prefectural governor, etc. (Article 3, paragraphs (7) and (8) of the Act)

**(2) When the prefectural governor, etc. having received a notification of changes to the form or nature of land of a certain size or more, find that the land has possible soil contamination (Article 4 of the Act)**

- Changes to the form or nature of land with an area of more than or equal to 3,000 square meters or changes to the form or nature of land with an area of more than or equal to 900 square meters where a specified facility using hazardous substances is currently located should be notified
- It is also possible that an investigation is conducted with the consent of all of the owner, etc. of the land before the notification described above and the results of the investigation are submitted to the prefectural governor together with the notification of the changes to the form or nature of land (Article 4, paragraph (2) of the Act)

**(3) When the prefectural governor, etc. find that land is suspected to cause any harm to human health due to soil contamination (Article 5 of the Act)**

**(4) If voluntary investigations reveal soil contamination, the owner, etc. of the land may file an application for designation of areas with the prefectural governor, etc. (Article 14 of the Act)**

With regard to (1) to (3), the owner, etc. of the land have designated investigation institutions conduct investigations and report the results of the investigations to the prefectural governor, etc.

If the situation of soil contamination exceeds the standards on designation

#### Regulations concerning carrying-out, etc. of contaminated soil, etc.

- Regulations concerning carrying-out of soil within areas which require measures and areas for which changes to form or nature require notification (Articles 16 and 17 of the Act) (prior notification, order to revise plan, conformity to standards for transport)
- Obligations to deliver and preserve control manifests concerning contaminated soil (Article 20 of the Act)
- License system of contaminated soil processing business (Article 22 of the Act)



## Designation, etc. of areas

### ○ Area which requires measures (Article 6 of the Act)

Area requiring measures for contamination removal, etc. since the existence of intake routes of contamination **have** risk that cause harm to human health

- The owner, etc. of the land shall prepare a plan for contamination removal, etc. concerning the instruction of the prefectural governor, etc., receive confirmation, implement measures for contamination removal, etc. pursuant to the confirmed plan, and make a report. (Article 7 of the Act)
- The general rule of prohibition on changes to the form or nature of land (Article 9 of the Act)

### ○ Area for which changes to form or nature require notification (Article 11 of the Act)

Area not requiring measures for contamination removal, etc. since there are no intake routes of contamination and **no** risk that cause harm to human health (including areas where intake routes have been blocked)

- Any person who intends to make changes to the form or nature of land shall notify the prefectural governor, etc. of the changes (Article 12 of the Act)

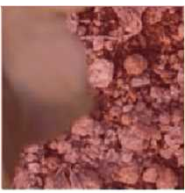
### Other

- Improvement of the reliability of designated investigation institutions (renewal of designation, appointment of a technical manager\*, etc.) (Articles 32 and 33 of the Act)
- Subsidies by the fund for soil contamination countermeasures (granting subsidies for measures for contamination removal, etc. if a person responsible for contamination is unclear or does not exist, and the ability to bear cost is low) (Article 45 of the Act)

(\*) Designated investigation institutions are required to assign a technical manager, and investigations are conducted under the guidance and supervision of the technical manager. Technical managers are required to pass a national examination, have certain practical experience and complete courses for renewal of qualification.

When the contamination is removed, designation of areas is cancelled

The purpose of the Soil Contamination Countermeasures Act is to prevent harm to human health caused by soil contamination. In order to achieve this purpose, the Act sets forth the structure to detect soil contamination (what brings to investigations and the manner of investigations), to publicize the detected contamination (designation of the areas and public notices), to implement measures for contamination removal, etc. of the land which is suspected to cause harm to human health, and manage the land in a manner that does not cause any harm to human health (prior notification at the time of changes to the form or nature and carrying-out, etc.).  
Now, we are going to look at the detail of the systems.



## What brings to soil contamination investigations

Under the Soil Contamination Countermeasures Act, in the cases of (1) to (3) described below, investigations on soil contamination and report the result of the investigations to the prefectural governor, etc. are mandatory.

### (1) At the time of the termination of the use of specified facilities using hazardous substances\* <Article 3 of the Act>

- The owner, manager, or occupier (hereinafter referred to as the "owner, etc.") of land where defunct specified facilities using hazardous substances are located are obliged to conduct investigations.
- When the prefectural governor, etc. confirm that there are no risk that cause harm to human health caused by soil contamination in view of the manner in which the land is used, the owner, etc. are temporarily exempted from obligation of investigations (when the confirmation is cancelled because of altered use of the land, investigations become mandatory again).
- \* Specified facility using hazardous substances: the specified facility as provided in Article 2, paragraph (2) of the Water Pollution Control Act where specified hazardous substances are produced, used or processed
- In the case of changes to the form or nature of land with an area of more than or equal to 900 square meters that is subject to temporary exemption of investigations, the owner, etc. of the land are obliged to notify the prefectural governor, etc. of the changes in advance and receive an order to implement soil contamination investigations.

### (2) When the prefectural governor, etc. having received a notification of changes to the form or nature of land of a certain size or more, find that the land **has** possible soil contamination <Article 4 of the Act>

- Any person who intends to make changes to the form or nature of land of a certain size or more (\*1) is obliged to notify the prefectural governor, etc. of the changes at least 30 days before starting the changes to the form or nature of land.
- In such cases, in the manner provided for in Ordinance of the Ministry of the Environment, with the consent of all of the owner, etc. of the land, the person may have designated investigation institutions conduct investigations and submit the result together with the notification on the changes to the prefectural governor, etc.

- If finding that the notified land has risk of soil contamination (\*2), the prefectural governor, etc. issues an order to conduct soil contamination investigations to the owner, etc. of the land.

\*1 Certain size: 3,000 square meters (however, 900 square meters in the case of land where a specified facility using hazardous substances is currently located)

\*2 Risk of soil contamination: Whether or not land falls under the standards described below is decided based on the information held by administration (Article 26, each item of the Regulation).

- (1) Land where contamination due to specified hazardous substances is obviously non-conforming to the soil leachate standards or the soil content standards
- (2) Land where specified hazardous substances have been buried, and have dispersed, flown out, or seeped underground
- (3) Land where specified hazardous substances are or were produced, used, or processed
- (4) Land where specified hazardous substances are or were stored or preserved
- (5) Other land that is found to be possibly contaminated by specified hazardous substances to the same degree as the aforementioned (2) to (4)

### **(3) When the prefectural governor, etc. find that land **is** suspected to cause any harm to human health due to soil contamination <Article 5 of the Act>**

- If finding that the notified land has risk of harm to human health, the prefectural governor, etc. issue an order to conduct soil contamination investigations to the owner, etc. of the land.



## **About application for area designation based on voluntary investigations of soil contamination, etc.**

Under the Soil Contamination Countermeasures Act, in addition to the investigations described in the aforementioned (1) to (3), based on investigations of soil contamination, etc. voluntarily conducted, an application for area designation of the areas included in the following page can be voluntarily filed with the prefectural governor, etc. (Article 14 of the Act).

However, the land for which the result of the soil contamination investigations provided for in Article 4, paragraph (2) of the Act has been submitted is excluded.

### **<Conditions of application>**

- It is required that the result is obtained from investigations conducted fairly by using the official method.
- In the case where there are several owners, etc. of the land subject to the application, consent must be obtained from all of them.
- In the case of obvious soil contamination, etc., an application for designation of the areas may be filed without conducting investigations.



## About designation of the areas

When receiving a report on the result of soil contamination investigations, the prefectural governor, etc. designate the reported land as an area which requires measures or an area for which changes to form or nature require notification (hereinafter an “area which requires measures, etc.”) as shown below depending on whether there is a risk of harm to human health or not.

### (1) Area which requires measures

Area whose contamination situation is found not to meet the soil leachate standards or the soil content standards and in which there are found to be intake routes of soil contamination as a result of soil contamination investigations.

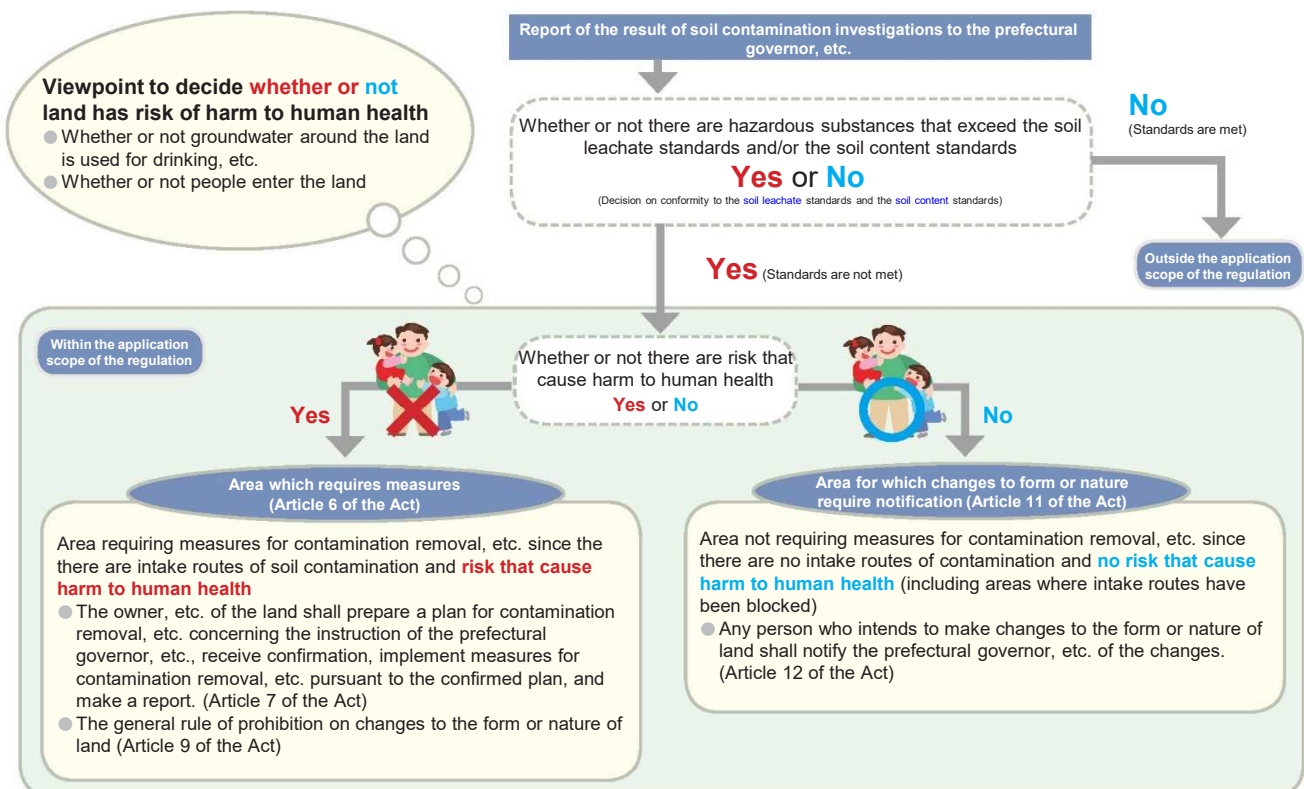
Since there are risk that cause harm to human health, measures for contamination removal, etc. is required.

### (2) Area for which changes to form or nature require notification

Area whose contamination situation is found not to meet the soil leachate standards or the soil content standards and in which there are found to be no intake routes of soil contamination as a result of soil contamination investigations.

Since there are no risk that cause harm to human health, measures for contamination removal, etc. is not required.

## Steps to be designated as an “area which requires measures” or “area for which changes to form or nature require notification”





## About measures for contamination removal, etc.

One of the intentions of the Soil Contamination Countermeasures Act is “to properly manage contaminated soil.” Accordingly, since there are risk of harm to human health in an area which requires measures, the prefectural governor, etc. instruct the owner, etc. of the land to prepare and submit a plan for contamination removal, etc. by showing an measures for contamination removal, etc. to be implemented (instructed measures) to the extent necessary to prevent harm to human health.

Instructed measures is as follow:

- Measurement of the quality of groundwater and containment\*1, etc. in the case of soil contamination in terms of risk of intake through groundwater, etc. (cases that do not meet the soil leachate standards)
- Embankment, etc. in the case of soil contamination in terms of risk of direct intake (cases that do not meet the soil content standards)

In addition, the case where the removal of soil contamination\*2 is specified in an instructed measure is limited in terms of the land use.

The owner, etc. of the land may select measures to be taken (the measures to be implemented) from measures for contamination removal, etc. that is deemed to have at least the same level of effects as the instructed measures in addition to it.

With regard to the measures to be implemented included in a plan for contamination removal, etc., technical standards are set according to each measures and if the measures does not meet such standards, the prefectural governor, etc. issue an order to change the plan.

Upon completion of the measures to be implemented included in a plan for contamination removal, etc., the owner, etc. of the land have to report the completion of the measures, etc. to the prefectural governor, etc.

In the meantime, with regard to areas for which changes to form or nature require notification, since there are no intake routes of soil contamination and no risk that cause harm to human health, measures for contamination removal, etc. is not required. However, in the case of changes to the form or nature of land, notification to the prefectural governor, etc. is required in advance.

\*1 Containment: measures to contain contaminated soil to prevent the contamination from spreading by groundwater, etc. These measures includes in-situ containment, containment by seepage control work and containment by blocking work.

\*2 Removal of soil contamination: measures to remove or purify contaminated soil. These measures includes removal by excavation and in-situ purification.





## About regulations concerning carrying-out

When contaminated soil is carried out from an area which requires measures, etc., prior notification is required. In addition, for transporting contaminated soil, compliance with the standards for transport and delivery and preservation of control manifests are mandatory.

In addition, under the Act, a person who carries out contaminated soil to a location outside an area which requires measures, etc. is required to entrust the processing of the contaminated soil to a contaminated soil processing licensee, in principle. Contaminated soil processing licensees mean those who process contaminated soil in the course of trade, and a license granted by the prefectural governor, etc. is required to operate such business.

In addition, as an exception of entrustment of contaminated soil processing, contaminated soil can be moved to another area which requires measures, etc. that satisfies certain conditions without entrusting the processing of contaminated soil.

### Notification of carrying-out

When contaminated soil is carried out from an area which requires measures, etc., the location of the contaminated soil to be carried out should be grasped.

At the time when contaminated soil is carried out, a person who carries out the contaminated soil is obliged to notify the prefectural governor, etc. of the carry-out at least 14 days before starting to carry out the soil. (Article 16 of the Act)

From the perspective that risk that cause harm to human health should be prevented when contaminated soil is carried out from an area which requires measures, etc., the location of the area which requires measures, etc., situations of contamination caused by specified hazardous substances, the manner of transport, a person who processes the contaminated soil and the facility, etc. should be included in the notification.

In addition, when contaminated soil is moved to another area which requires measures, etc. that satisfies certain conditions, the location of the area which requires measures, etc., situations of contamination caused by specified hazardous substances, the manner of transport, the location of the area which requires measures, etc. in which the contaminated soil is carried, etc. should be included in the notification and then should be submitted with documents proving that certain conditions are met.

In the meantime, if contaminated soil to be carried out has been analyzed again and the conformity to the standards on designation has been confirmed and certified by the prefectural governor, etc., the aforementioned 14 day prior notification is not required to be submitted.



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## Standards for transport

Transport of contaminated soil includes all activities to move contaminated soil within an area which requires measures, etc. to contaminated soil processing facilities or another area which requires measures, etc. that satisfies certain conditions beyond the boundary line of the area which requires measures, etc.

Since the transport of soil has a risk to spread contamination, standards have been set with regard to transport, and signs of the transport of contaminated soil are required to be placed on both sides of vehicles such as automobiles, ships and trains.

In addition, transport includes temporary storage at storage facilities in addition to the loaded situation on automobiles, etc.

Different from the transport of gravel, etc. which do not contain specified hazardous substances, when contaminated soil is transported in a manner not satisfying the standards, such transport is subject to penalties.

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## Control manifest

It is important to manage that contaminated soil is properly transported and processed or whether it is used for changes to the form or nature of land in another area which requires measures, etc. This is because there are possible cases of improper processing of contaminated soil by illegal dumping during transport.

Accordingly, the Soil Contamination Countermeasures Act sets forth the use of control manifests when contaminated soil is carried out, transported, processed, or used (Article 20 of the Act). It is mandatory to deliver or refer control manifests to the relevant parties within the deadline when contaminated soil is transported or processed.

In addition, the form of control manifests has been specified (Form No. 29 of Article 67, paragraph (2) of the Regulation).

Moreover, the storage of control manifests in both forms of paper-based record or electromagnetic record are acceptable.

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## Contaminated soil processing business

The contaminated soil processing business is a business that processes contaminated soil with a license granted by the prefectural governor, etc.

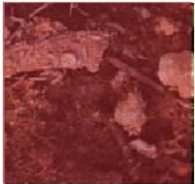
In order to obtain the license, the facilities and applicants not only must have capabilities that meet the standards but also the applicants must not fall under the disqualification requirements.

In addition, contaminated soil processing licensees are obliged to comply with the standards on processing to process contaminated soil (Article 22, paragraphs (3) and (6) of the Act).

Furthermore, permission or notification may be required for a change in their contaminated soil processing facilities (processing facilities for purification, etc., facilities for cement production, landfill processing facilities, processing facilities for sorting, etc., facilities for the use of soil contaminated by nature, etc.) held by a contaminated soil processing licensee.

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The Soil Contamination Countermeasures Act also provides institutions that conduct soil contamination investigations and corporations that conduct support business set forth in the Soil Contamination Countermeasures Act.



## Designated investigation institution

Results of investigations under the Soil Contamination Countermeasures Act have a decisive influence on the policies of soil contamination countermeasures for the relevant land and therefore, the reliability of investigation results should be ensured.

Accordingly, the Act provide that the Minister of the Environment or the prefectural governor shall designate a corporation who is able to conduct investigations in a proper manner and that only such designated person shall conduct investigations of soil contamination under the Soil Contamination Countermeasures Act. Such person who is designated by the Minister of the Environment or the prefectural governor and conducts investigations of soil contamination under the Soil Contamination Countermeasures Act is the designated investigation institution.

Each designated investigation institution is required to assign a technical manager (a person who manages technical aspects) in order to properly conduct investigations, and investigations are conducted under the guidance and supervision of the technical manager.

In addition, the requirements to be qualified as a technical manager include passing the technical manager examination implemented by the Ministry of the Environment and certain practical experience. This ensures that investigations under the Soil Contamination Countermeasures Act are conducted under the management of persons with appropriate skill and knowledge.



## Designated support corporation

The designated support corporation means a corporation that is found to be capable of properly and unfailingly conducting the support business set forth in the Soil Contamination Countermeasures Act and receives a designation by the Minister of the Environment.

The Japan Environment Association received designation on December 25, 2002 (changed to a public interest incorporated foundation from an incorporated foundation on April 1, 2013).

The support business conducted by designated support corporations is categorized into the following three:

### Business related to granting subsidies

Designated support corporations grant a subsidy to prefectural governments, etc. that provide aid to persons who implement measures for contamination removal, etc. (Granting subsidies has conditions. For details, please visit the website of the designated support corporations.)

(<http://www.jeas.or.jp/dojo/business/grant/>) (in Japanese)

### Business related to responding to inquiries and consultation

Designated support corporations respond to inquiries and requests for consultation, and provide advice, etc. with regard to soil contamination including soil contamination investigations and measures for contamination removal, etc.

(<http://www.jeas.or.jp/dojo/business/consult/>) (in Japanese)

### Business related to disseminating knowledge and promoting public understanding

Designated support corporations promote public understanding on harm to human health due to soil contamination by preparing and distributing explanatory booklets and holding seminars free of charge on a regular basis.

(<http://www.jeas.or.jp/dojo/business/promote/>) (in Japanese)

In order to implement the aforementioned three types of business, designated support corporations establish and manage the fund for soil contamination countermeasures.



# 5

# About financial support system

The system has been established for granting subsidies from the fund for soil contamination countermeasures to (the head of) local governments that grant subsidies to any person (limited to those who meet requirements for subsidies) who is instructed to prepare a plan for contamination removal, etc. and submit such plan to (the head of) local governments for smooth promotion of measures for contamination removal, etc. related to the instruction.

In addition, some of (the head of) local governments have established loan systems. For details, contact the relevant department of local governments (“9. Contact information” on page 24).

In addition, Japan Finance Corporation, which is a government-affiliated financial institution also has established a loan system.

[https://www.jfc.go.jp/n/finance/search/15\\_kankyoutaisaku.html#k10](https://www.jfc.go.jp/n/finance/search/15_kankyoutaisaku.html#k10) (in Japanese)

## Subsidies by the fund for soil contamination countermeasures

The fund has been created by subsidies from the national government and contributions from business communities, etc., and contributions from the public are also accepted. In addition, the fund is managed by the Japan Environment Association which is a designated support corporation.

The owner, etc. of the land who is granted by (the head of) local governments are eligible for subsidies from the fund for soil contamination countermeasures if they meet the following requirements:

- ◆ The case where the owner, etc. of the land who have conducted investigations under the Act for the land designated as an area which requires measures and has received instructions to prepare a plan for contamination removal, etc. and to submit the plan to (the head of) local governments
- ◆ The case where a person responsible for contamination is unclear or does not exist
- ◆ The case where the standards for the ability to bear cost (Standards for the ability to bear cost (Public Notice of the Ministry of the Environment No.4, January 2004))

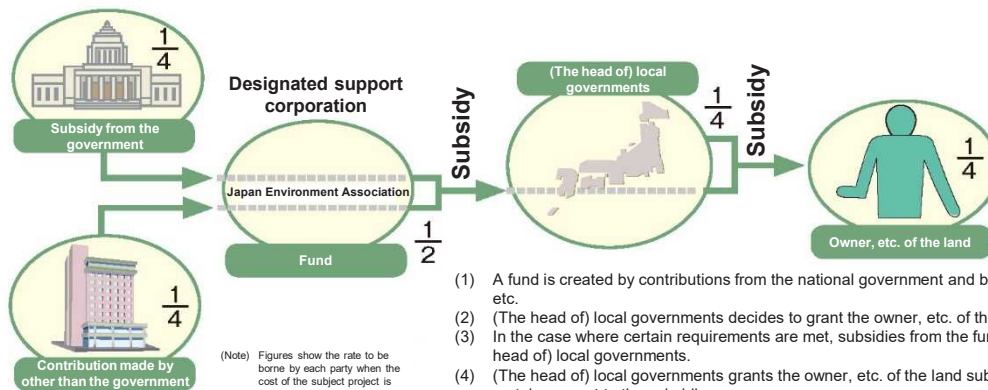
The amount of subsidies from the fund does not exceed the amount equivalent to two-thirds of subsidies granted by (the head of) local governments under the subsidy system or the amount equivalent to half of the cost for the countermeasures subject to the subsidy, whichever is lower.

For example, assuming the cost of the subject project to be one, if the rate of the subsidy that (the head of) local governments grant to the owner, etc. of the land is three-fourths, subsidy equivalent to three-fourths of the cost is granted to the owner, etc. at the maximum.

In addition, the Japan Environment Association provides a consultation service for those who wish to receive subsidies. Please use this service. (See “9. Contact information” on page 24.)

### Flow of granting subsidies

[Case where the rate of the subsidy that (the head of) local governments grant to the owner, etc. of the land is three-fourths]



- (1) A fund is created by contributions from the national government and business communities, etc.
- (2) (The head of) local governments decides to grant the owner, etc. of the land subsidies.
- (3) In the case where certain requirements are met, subsidies from the fund are granted to (the head of) local governments.
- (4) (The head of) local governments grants the owner, etc. of the land subsidies by adding a certain amount to the subsidies.



# 10 words for easy understanding of the Soil Contamination Countermeasures Act

1

## Specified hazardous substances

Twenty-six substances that Order for Enforcement of the Soil Contamination Countermeasures Act provides to be hazardous substances that have risk that cause harm to human health as they are contained in soil or groundwater. They are classified as follows: class 1 specified hazardous substances (volatile organic compounds), class 2 specified hazardous substances (heavy metals, etc.) and class 3 specified hazardous substances (agricultural chemicals, etc.), and reference values such as the soil leachate standards and the soil content standards have been set for each substance. (See “8. Related materials” on page 23.)

2

## Soil contamination investigations, etc.

An investigation which is implemented because of matters described on page 10 and 11 and shown in table (1) to (3) below is called a soil contamination investigation and all types of the investigation should be conducted by designated investigation institutions, that are investigation companies designated by the Minister of the Environment or the prefectural governor.

- |     |  |
|-----|--|
| (1) | Investigations of soil contamination conducted at the site of plants or workplaces with defunct specified facilities which using hazardous substances (Article 3, paragraph (1) of the Act) and investigations of soil contamination conducted at the time of changes to the form or nature of land where obligation of such investigations are temporarily exempted (Article 3, paragraph (8) of the Act) |
| (2) | Investigations of soil contamination conducted at the time of changes to the form or nature of land with possible soil contamination (Article 4, paragraphs (2) and (3) of the Act)  |
| (3) | Investigations of soil contamination conducted for land which there are risk that cause harm to human health due to soil contamination (Article 5 of the Act)  |

3

## Designated investigation institution

Investigation institutions designated by the Minister of the Environment or the prefectural governor to implement soil contamination investigations, etc. In order to become a designated institution, standards for designation must be met (having an economic base and technical ability necessary to properly and smoothly operate business including investigations and not falling under the disqualification requirements). Designated investigation institutions can be found on the website of the Ministry of the Environment described below through a search by area. <http://www.env.go.jp/water/dojo/kikan/index.html> (in Japanese)

In addition, the designated investigation institutions are obliged to appoint and allocate technical managers in charge of management of soil contamination investigations, etc. from the aspect of technology. Technical managers are required to pass the national examination and have certain practical experience.

4

## Area which requires measures, etc.

If the result of soil contamination investigations, etc. revealed that the contamination situation due to specified hazardous substances contained in the soil of the land exceeds the standards on designation, the land is designated by the prefectural governor, etc. as an area which requires measures or an area for which changes to form or nature require notification (these two areas are collectively referred to as an “area which requires measures, etc.”). (See “About designation of the areas” on page 12.)

With regard to areas for which changes to form or nature require notification, as areas where the standards on how to implement changes to the form or nature of land are modified, depending on the situations of contamination of the land, special-case areas for contamination by nature, special-case areas for landfill, and controlled areas for landfill have been set.



In addition, of areas for which changes to form or nature require notification, as areas that the prefectural governor, etc. confirm policies on the implementation and management of changes to the form or nature of land and that are subject to annual ex post facto notification instead of prior notification for each change to the form or nature of land, special-case areas at coastal areas have been set.

## 5 Plan for contamination removal, etc.

Plans for contamination removal, etc. are plans that include the manner in which measures for contamination removal, etc. is carried out in areas which require measures and times, etc. for such measures. The owner, etc. of the land (or a person who caused contamination) should submit a plan for contamination removal, etc. to and receive confirmation by the prefectural governor, etc. and implement measures for contamination removal, etc. according to the confirmed plan.

The prefectural governor, etc. show measures for contamination removal, etc. to be implemented (instructed measures) and give instructions to prepare a plan for contamination removal, etc., and the owner, etc. of the land may select measures to be taken (the measures to be implemented) from such instructed measures and other measures for contamination removal, etc. that is deemed to have at least the same level of effects as the instructed measures.

When the owner, etc. of the land implemented the measures to be implemented on behalf of a person who caused the contamination, the owner, etc. of the land may claim the cost required for such measures, etc. to the extent of the cost required for the instructed measures.

## 6 Registry

The prefectural governor, etc. prepare and manage a registry that includes information on areas which require measures and areas for which changes to form or nature require notification upon designation of such areas or cancellation of such area designation.

## 7 Contaminated soil

Under the Soil Contamination Countermeasures Act, soil to be treated as contaminated soil means soil of land within an area which requires measures, etc. other than the soil that is found to meet the standards by investigations on the soil to be carried out (Article 16, paragraph (1) of the Act). In other words, even in the case where soil is found not to meet the soil leachate standards or the soil content standards in an area that is not designated to be an area which requires measures, etc., such soil of the land is not deemed to be contaminated soil under the Act. However, if contamination is found in the soil of land outside an area which requires measures, etc., it is desirable to handle such contamination according to the law. Therefore, with regard to the handling of such cases, please consult the prefectural governor, etc.



## 8

## Cancellation of area designation

The designation of an area which requires measures, etc. is cancelled when the reason for the designation ceases to exist. If intake routes of contamination have been blocked in an area which requires measures, the designation of an area which requires measures is cancelled and the land is designated as an area for which changes to form or nature require notification. In order for the designation of an area for which changes to form or nature require notification to be cancelled, soil that does not meet the standards has to cease to exist within the area. Accordingly, in the case where soil contamination has been removed (removal of contaminated soil itself, or purification by agents and microorganisms), the designation of the area is cancelled.

## 10

## Contaminated soil processing business

When a person engages in the business of processing contaminated soil, a license for the contaminated soil processing business should be obtained from the prefectural governor, etc. In order to obtain the license, the standards on the license must be met (the capabilities of contaminated soil processing facilities and applicants are sufficient enough to conduct operations reliably and satisfactorily on an ongoing basis, and the applicants do not fall under the disqualification requirements).

Details can be found on the website of the Ministry of the Environment described below.

<http://www.env.go.jp/water/dojo/wpcl.html> (in Japanese)

## 9

## Control manifest

When transport or processing of contaminated soil is entrusted to others, etc., the use of control manifests is obligated so as to ensure that the process of transport or processing is managed and the record of such process is stored.

In addition, it is mandatory to store control manifests for five years in the forms of paper-based record or electromagnetic record.

Details can be found on the brochure about the structure of control manifests concerning carrying-out of contaminated soil described below.

<http://www.jeas.or.jp/dojo/business/promote/booklet/04.html>  
1 (in Japanese)





# Soil Contamination Countermeasures Act Q&A

Q1

We have a plan to close our plant. What should be done?

A1

First, submit a notification on abolishment of the specified facilities set forth in the Water Pollution Control Act to the prefectural governor, etc.

In addition, in the case where specified hazardous substances have been used, investigations are mandatory (Article 3, paragraph (1) of the Act). Consult prefectural governments, etc. or designated investigation institutions.

Q2

What activities are deemed to be changes to the form or nature of land?

A2

General activities that change the form of land are deemed to be changes to the form or nature of land. Activities such as excavation and embankment are also included. In addition, the area of changes to the form or nature of land is the total area of the places of excavation and embankment.

Q3

We plan to make changes to the form or nature of land. What should be done?

A3

Notification is required in the case where the area of changes to the form or nature of land is more than or equal to 3,000 square meters (more than or equal to 900 square meters in the case of land where a specified facility using hazardous substances is currently located) (Article 4, paragraph (1) of the Act). Notification should be submitted to the prefectural governor, etc.

Upon notification, in the manner provided for in Ordinance of the Ministry of the Environment, with the consent of all of the owner, etc. of the land, the person may have designated investigation institutions conduct investigations and submit the result together with the notification on the relevant changes to the prefectural governor, etc. (Article 4, paragraph (2) of the Act).

Drawings that clearly show the location of the planned changes to the form or nature of land should be attached to the notification.

However, in the case of an embankment alone, notification is not required.

Q4

Is it right that areas for which changes to form or nature require notification do not require countermeasures?

A4

Since areas for which changes to form or nature require notification are land that does not have intake routes of soil contamination and risk that cause harm to human health, implementation of measures for contamination removal, etc. is not required. However, in the case where changes to the form or nature of land is implemented, prior notifications are mandatory.

Q<sup>5</sup>

What is the application for designation? What items are required as documents?

A<sup>5</sup>

The application for designation means as follows: When soil contamination investigations are conducted voluntarily and soil contamination is detected by such voluntary investigations, an application can be filed voluntarily to obtain designation as an area which requires measures or an area for which changes to form or nature require notification for the land in order to place the land under appropriate management by the prefectural governor, etc.

In order to file an application for designation, the following are required:

- 
- (1) **Predetermined application form**
  - (2) **Maps of the periphery of the land related to the application**
  - (3) **Drawings that clearly show the location (range) related to the application**
  - (4) **Drawings that clearly show the contamination situation due to specified hazardous substances in the soil of the land related to the application**
  - (5) **Documents to prove that the applicant is the owner, etc. of the land related to the application**
- 

If there are other owners, etc. of the land related to the application except the applicant, in addition to (1) to (5), the following is required:

- 
- (6) **Documents to prove that consent on filing the application has been obtained from all of the owners, etc.**
- 

Q<sup>6</sup>

Is a license required to engage in business to transport contaminated soil?

A<sup>6</sup>

There are no systems related to a license for the business to transport contaminated soil. However, any person who intends to carry out contaminated soil from an area which requires measures, etc. should submit a notification to the prefectural governor, etc. at least 14 days before starting to carry out the soil (Article 16 of the Act). In addition, at the time of transporting contaminated soil outside an Area which requires measures, etc., the standards should be observed (Article 17 of the Act).

Q<sup>7</sup>

With regard to contaminated soil found outside an Area which requires measures, etc., is it mandatory to transport the soil to contaminated soil processing facilities and entrust processing of the soil?

A<sup>7</sup>

Although such handling is not mandatory under the Soil Contamination Countermeasures Act, it is desirable to properly handle such soil in the course of transport and processing according to the provisions of the Act (Chapter 4 of the Act) from the perspective of health hazard prevention, etc.



# 8 Related materials

## ◆ Standards on designation (appendix of standards on contamination situations of soil)

(1) The standards on the amount of elution into soil (soil leachate standards) in terms of risk of intake through groundwater, etc. and (2) the standards on the content in soil (soil content standards) in terms of risk of direct intake have been set. The soil leachate standards have been set for all specified hazardous substances while the soil content standards have been set for only nine substances, mainly heavy metals, of specified hazardous substances.

Classes of specified hazardous substances		<Risk by intake of groundwater, etc.> Soil leachate standards	<Risk by direct intake> Soil content standards
Class 1 specified hazardous substances (volatile organic compounds)	Chloroethylene	To be 0.002 mg or less per liter of test solution	/
	Carbon tetrachloride	To be 0.002 mg or less per liter of test solution	
	1,2-Dichloroethane	To be 0.004 mg or less per liter of test solution	
	1,1-Dichloroethylene	To be 0.1 mg or less per liter of test solution	
	1,2-Dichloroethylene	To be 0.04 mg or less per liter of test solution	
	1,3-Dichloropropene	To be 0.002 mg or less per liter of test solution	
	Dichloromethane	To be 0.02 mg or less per liter of test solution	
	Tetrachloroethylene	To be 0.01 mg or less per liter of test solution	
	1,1,1-Trichloroethane	To be 1 mg or less per liter of test solution	
	1,1,2-Trichloroethane	To be 0.006 mg or less per liter of test solution	
	Trichloroethylene	To be 0.01 mg or less per liter of test solution	
	Benzene	To be 0.01 mg or less per liter of test solution	
Class 2 specified hazardous substances (Heavy metals, etc.)	Cadmium and its compounds	To be 0.003 mg or less of cadmium per liter of test solution	To be 45 mg or less of cadmium per kilogram of soil
	Chromium (VI) compounds	To be 0.05 mg or less of chromium (VI) per liter of test solution	To be 250 mg or less of chromium (VI) per kilogram of soil
	Cyanogen compounds	To not detect cyanogen in test solution	To be 50 mg or less of free cyanide per kilogram of soil
	Mercury and its compounds	To be 0.0005 mg or less of mercury per liter of test solution and with no detection of alkylmercury in test solution	To be 15 mg or less of mercury per kilogram of soil
	Selenium and its compounds	To be 0.01 mg or less of selenium per liter of test solution	To be 150 mg or less of selenium per kilogram of soil
	Lead and its compounds	To be 0.01 mg or less of lead per liter of test solution	To be 150 mg or less of lead per kilogram of soil
	Arsenic and its compounds	To be 0.01 mg or less of arsenic per liter of test solution	To be 150 mg or less of arsenic per kilogram of soil
	Fluorine and its compounds	To be 0.8 mg or less of fluorine per liter of test solution	To be 4,000 mg or less of fluorine per kilogram of soil
	Boron and its compounds	To be 1 mg or less of boron per liter of test solution	To be 4,000 mg or less of boron per kilogram of soil
Class 3 specified hazardous substances (agricultural chemicals, etc./ agricultural chemicals + PCB)	Simazine	To be 0.003 mg or less per liter of test solution	/
	Thiobencarb	To be 0.02 mg or less per liter of test solution	
	Thiuram	To be 0.006 mg or less per liter of test solution	
	Polychlorinated biphenyl (PCB)	To not be detected in test solution	
	Organic phosphorus compounds	To not be detected in test solution	

Note: Ordinance for Partial Revision of Regulations for Enforcement of the Soil Contamination Countermeasures Act (Ordinance No. 14 of 2020) was promulgated on April 2, 2020, standards of Cadmium and its compounds and Trichloroethylene were revised. This revision entered into force on April 1, 2021.



# Contact information

## ◆ Soil Environment Management Division, Environmental Management Bureau, Ministry of the Environment

1-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8975

TEL: **03-3581-3351** (main)

Website of the Ministry of the Environment <http://www.env.go.jp/water/dojo.html> (in Japanese)

## ◆ Designated support corporation

Soil Environment Section, Japan Environment Association

TMM BLDG. 5F, 1-10-5 Iwamotocho, Chiyoda-ku, Tokyo 101-0032

TEL **03-5829-6894**

Website of the Association <http://www.jeas.or.jp/dojo/index.html> (in Japanese)

## ◆ Departments and bureaus in charge of soil contamination of 47 prefectures and the cities described below (described as the “prefectural governor, etc.” in the main text)

<b>Hokkaido, Tohoku</b>	Sapporo City, Hakodate City, Asahikawa City, Aomori City, Hachinohe City, Morioka City, Sendai City, Akita City, Yamagata City, Fukushima City, Koriyama City, Iwaki City
<b>Kanto</b>	Mito City, Tsukuba City, Utsunomiya City, Maebashi City, Takasaki City, Isesaki City, Ota City, Saitama City, Kawagoe City, Kumagaya City, Kawaguchi City, Tokorozawa City, Koshigaya City, Kasukabe City, Soka City, Chiba City, Funabashi City, Kashiwa City, Ichikawa City, Matsudo City, Ichihara City, Hachioji City, Machida City, Yokohama City, Kawasaki City, Yokosuka City, Sagami City, Hiratsuka City, Fujisawa City, Odawara City, Chigasaki City, Atsugi City, Yamato City
<b>Chubu</b>	Niigata City, Nagaoka City, Joetsu City, Toyama City, Kanazawa City, Fukui City, Kofu City, Nagano City, Matsumoto City, Gifu City, Shizuoka City, Hamamatsu City, Numazu City, Fuji City, Nagoya City, Toyota City, Toyohashi City, Okazaki City, Ichinomiya City, Kasugai City
<b>Kinki</b>	Yokkaichi City, Otsu City, Kyoto City, Osaka City, Sakai City, Takatsuki City, Higashiosaka City, Toyonaka City, Suita City, Hirakata City, Yao City, Kishiwada City, Ibaraki City, Neyagawa City, Kobe City, Himeji City, Nishinomiya City, Amagasaki City, Akashi City, Kakogawa City, Takarazuka City, Nara City, Wakayama City
<b>Chugoku, Shikoku</b>	Tottori City, Matsue City, Okayama City, Kurashiki City, Hiroshima City, Fukuyama City, Kure City, Shimonoseki City, Tokushima City, Takamatsu City, Matsuyama City, Kochi City
<b>Kyushu, Okinawa</b>	Kitakyushu City, Fukuoka City, Kurume City, Saga City, Nagasaki City, Sasebo City, Kumamoto City, Oita City, Miyazaki City, Kagoshima City, Naha City

(as of April 1, 2020)

Contact information on municipal governments described above can be found on the website of the Ministry of the Environment described below.

<http://www.env.go.jp/water/dojo/law/mado.html> (in Japanese)



Laws, public notices, etc. described below can be found on the websites.

**Ministry of the Environment (<http://www.env.go.jp/water/dojo/law/kaisei2009.html>)(in Japanese)**

**Japan Environment Association (<http://www.jeas.or.jp/dojo/law/list.html>) (in Japanese)**

◆Articles related to the Soil Contamination Countermeasures Act◆

◆Public Notices under the Soil Contamination Countermeasures Act◆

◆Notice on enforcement of the Soil Contamination Countermeasures Act, etc.◆

◆Clerical communications of the Soil Contamination Countermeasures Act◆

◆Reference materials related to the Soil Contamination Countermeasures Act◆

◆Other reference◆

