Regulations concerning Asbestos

The following six fibrous silicate minerals are legally defined as asbestos; chrysotile, amosite (brown asbestos), crocidolite (blue asbestos), anthophyllite, tremolite, actinolite.

Among them chrysotile, amosite and crocidolite are in regular use but amosite and crocidolite were banned from use in April 1995 due to their highly harmful effect. On October 1, 2004, some of asbestos-containing products used as building, friction and adhesive materials, were prohibited from use and in September 2006 totally banned from import, manufacture, use etc. (For products exceptionally allowed for limited specified use in specific industries for the meantime, refer to the HP of the Ministry of Health, Labor and Welfare. http://www.mhlw.go.jp/new-info/kobetu/roudou/sekimenuhourei/dl/hou07-281c.pdf).

Under the circumstances where serious social issues regarding asbestos are getting more acute, the outlook is that the demolition of buildings sprayed or using asbestos will increase and more tight control in the workplace will be necessary. The Japan Asbestos Association prepared a manual titled “Regulations on Asbestos” in 1995 hoping for the tight control of asbestos and according to the amendment of laws etc., we issued revised editions in 1997, 2000, 2004, 2005 and May and December 2006. In our October 2007 volume, the issue was updated according to the enforcement of the amended Industrial Safety and Health Regulations. We hope full use will be made of this manual.

1. Asbestos related regulations in Japan

Presently, the regulations concerning asbestos in Japan have been drafted aiming to prevent worker’s health disturbance (illness/sickness/harmful effects on workers) and also for general environment conservation as well as pollution control. In this edition, regulations are mentioned and especially focus on the work of demolition of buildings and structures that contain asbestos.

1.1 The Industrial Safety and Health Law, Enforcement Order and Regulations

The purpose of this Law (hereinafter referred to as ISHA) is to secure the safety and health of workers in the workplace as well as to facilitate the establishment of comfortable working environment by promoting comprehensive and systematic countermeasures concerning the prevention of industrial accidents.

Especially, ‘Prohibition of manufacturing, etc.’, ‘Labelling of the names of substance, etc.’, ‘Personal health record, etc.’ are described in the Art.s on asbestos and the Table 1 is an outline of the relevant regulations.

Chart 1. Outline of the ISHA, Enforcement Order and Regulations (ISH Regulations)

<table>
<thead>
<tr>
<th>ISHL</th>
<th>Enforcement Order</th>
<th>ISH Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prohibition of Manufacturing, etc. (Art. 55)</td>
<td>Hazardous substances etc. manufacturing is prohibited (Art. 16 Sec.1): No. 4: Asbestos No. 9: Products containing more than 0.1% asbestos in weight.</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Requirements</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Labeling, etc. (Art. 57)</td>
<td>(Name of the substance, Ingredients &amp; Content, Effects on the human body, Precautions concerning storage or handling, etc.)</td>
<td>Hazardous substances their names etc. should be labelled (Art. 18) (Attn.)</td>
</tr>
<tr>
<td>Delivery of Documents, etc. (Art. 57-2)</td>
<td>(Contents of Art. 57, Physical and chemical properties, Emergency measures, etc.)</td>
<td>Hazardous substances the name etc. should be noticed (Art. 30) (Attn.)</td>
</tr>
<tr>
<td>Personal Health Record (Art. 67)</td>
<td>Issue a personal health record (Art. 23): To workers No.3 – Engaged in dusty work No.11 – Engaged in handling asbestos</td>
<td>Personal Health Record (Art. 53 ～60) Requirements for issuance of Personal Health Record 1) Following the Pneumoconiosis Law (Art. 13-2 etc.), the workers are evaluated according to the classifications for supervision of pneumoconiosis (CSP) and a personal health record is issued to those classified as CSP-2, 3 (No. 3) 2) Asbestos-exposed workers who are suffering from irregular opacities or thickened pleura in double lung fields (No. 11～) 3) Workers who had been engaged in manufacturing/handling asbestos etc. for over one year and in addition to over ten years had passed since first being exposed to asbestos. • Work engaged in manufacturing asbestos etc. • Work engaged in splaying or removing etc. of asbestos-containing material • Work engaged in sticking or removing asbestos-containing lagged material 4) Workers who had been engaged in handling asbestos etc. for over 10 years excluding 3). 5) In the cases which fall under items established by a Minister of the Health, Labour and Welfare.</td>
</tr>
<tr>
<td>Notification of Plans, etc. (Art. 88)</td>
<td>Machines etc. installing plans should be notified (Art. 88, 90) *Plans to remove sprayed asbestos should be notified.</td>
<td></td>
</tr>
</tbody>
</table>

Attn.) According to the Prohibition of Asbestos Production and Use, the Articles related to asbestos had been deleted from the Law. However, for the products whose manufacturing etc. are still allowed for the meantime, labelling and noticing are required.
1.2 The Asbestos Disability Prevention Rule 

(Ministry of Health, Labour and Welfare)

In the Rules, it is regulated that to prevent worker’s health disturbance from asbestos exposures, such as lung cancer, mesothelioma etc., exposure to asbestos be minimized by implementing necessary measures, such as the improvement of working method, relevant facilities, etc.

In the Rules, management standards for manufacturing and handling asbestos and asbestos-containing products are regulated, focusing on measures related to demolishing work and so on.

Chart 2. Outlines of the ISHA and the Asbestos Disability Prevention Rules

<table>
<thead>
<tr>
<th>The ISHA</th>
<th>The Asbestos Disability Prevention Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations Chief (Art. 14)</td>
<td>Appointment of operations chief (Art. 19),</td>
</tr>
<tr>
<td>*Attn.</td>
<td>Provision of a common rest area (Art. 28)</td>
</tr>
<tr>
<td>Necessary Measures should be taken by Employer (Art. 22)</td>
<td>Preliminary Survey (Art. 3), Work Plan (Art. 4), Measures for removing sprayed asbestos etc. (Art. 6)</td>
</tr>
<tr>
<td>Measures for removing asbestos etc. used lagged material or refractory investment material etc. (Art. 7)</td>
<td>Floor (Art. 29)</td>
</tr>
<tr>
<td>Measures for working with buildings etc. sprayed or using asbestos (Art. 10)</td>
<td>Cleaning (Art. 30)</td>
</tr>
<tr>
<td>Working Facilities etc. (Art. 12)</td>
<td>Setting cleaning facilities (Art. 31)</td>
</tr>
<tr>
<td>Measures for the work cutting asbestos etc. (Art. 13, 14)</td>
<td>Containers etc. (Art. 32)</td>
</tr>
<tr>
<td>Measures for Entry Prohibition (Art. 15)</td>
<td>Removal of extraneous matter from used instruments (Art. 32-2)</td>
</tr>
<tr>
<td>Requirements for local exhaust ventilation etc., Operating (Art. 16, 17), Dust exhaustion (Art. 18)</td>
<td>“No food or beverages, no smoking” Signs (Art. 33)</td>
</tr>
<tr>
<td>Check of machines etc. periodical self inspection should be made</td>
<td>Displays/Signs at the work place (Art. 34)</td>
</tr>
<tr>
<td>Periodical Self Inspection (Art. 45)</td>
<td>Work Record (Art. 35)</td>
</tr>
<tr>
<td>Machines etc. periodical voluntary inspection should be made. (Art. 21～23)</td>
<td>Respirators (Art. 44～46)</td>
</tr>
<tr>
<td>Occupational health and safety education (Art. 59)</td>
<td>Special Education (Art. 27)</td>
</tr>
<tr>
<td>Medical Examination (Art. 66)</td>
<td>Carrying out the medical examination, Medical record, Medical report, etc. (Art. 40～43)</td>
</tr>
<tr>
<td>Report etc. (Art. 100)</td>
<td>Working notification (Art. 5)</td>
</tr>
</tbody>
</table>

*Attn.: Art. 18 of The Ordinance on Industrial Safety and Health: inform everybody of the name of operation chief etc.
Exempt Items from the Asbestos Disability Prevention Rules

1) **Products containing less than 0.1% asbestos**

When the products containing less than 0.1% asbestos are handled, the related articles are to be exempted from application of the Asbestos Disability Prevention Rules, such as, Appointment of chief worker, Working environment measurement, Special health examination, Displaying and labeling, Working records, Wetting, Rest room, Cleansing facilities, Respirator, etc. However, even those items excluded from the Asbestos Disability Prevention Rules, there are applicable cases by the Ordinance on Prevention of Hazards due to Dust.

2) **Installation of local exhaust ventilation**
   1. In the case where installation of local exhaust ventilation is extremely difficult (Art. 12 Sec.1)
   2. In the case of doing temporary work (Art.12 Sec.1). However, to prevent damage to worker’s health, taking measures, such as, the installation of a total ventilator or keeping asbestos materials wet etc. are necessary. (Art.12 Sec.2).
   3. In the case the point source diffusion is outside (Art.12 Sec.1)

3) **Work free from the possibility of exposure to asbestos dust:**

Work of simple mounting tasks with asbestos-containing molded products, such as outer or inner covering of the buildings, duct of machineries, pipes etc. without cutting operations, does not fall under the category "Work related to handling asbestos" in Asbestos Disability Prevention Rule as such work is judged to be work where "there is no possibility of disperse asbestos so that workers will not be exposed to asbestos dust". Therefore, items "Appointment of chief worker", "Providing special medical examinations to workers" and others regulated in the Asbestos Disability Prevention Rule shall scarcely be covered. (Notice of the Ministry of Labour No.110-1- (6), in 1975)

---

1.3 **The Working Environment Measurement Law, Enforcement Order & Rules**
(Ministry of Health, Labour and Welfare)

Necessary items for the measurement of working environment, such as "qualifications of work environment measurement expert", "organizations of measurement of working environment", etc. are regulated.

- Article 10-2 of Working Environment Measurement Standards; (measurement of asbestos concentration)
- Working Environment Evaluation standards……Control Concentration Level: Asbestos 0.15f/cc

1.4 **The Pneumoconiosis Law & Enforcement Regulations**
(Ministry of Health, Labour and Welfare)

The disease, which has the main effect of fibrous proliferative change in lung tissue by inhaling dust, is called Pneumoconiosis. The pneumoconiosis Law is enacted aiming to contribute to the enhancement of welfare including preservation of worker’s health by taking necessary measures, such as appropriate prevention, health control, etc. Chart 3 is an outline of the Law and regulations.
### Chart 3. Outline of The Pneumoconiosis Law & Enforcement Regulations

<table>
<thead>
<tr>
<th>The Pneumoconiosis Law</th>
<th>Enforcement Ordinance of Pneumoconiosis Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions (Art.2)</td>
<td>Work with dust related operations (Art.2) Appendices (No. 24)</td>
</tr>
<tr>
<td>Pneumoconiosis Medical Examination (Art. 3)</td>
<td>Clinical Inspection of the chest (Art. 4) Pulmonary Function Test (Art. 5) Tuberculosis Close Examination (Art. 6) Examination of/or complications excluding tuberculosis (Art. 7)</td>
</tr>
<tr>
<td>Chest X-ray Films and Classification of Pneumoconiosis Management (Art. 4)</td>
<td>Exemption from Medical Examination (Art. 9) Partial Exemption (Art.10) Non-periodic Medical Examination (Art. 11) Medical Examination for workers leaving job (Art. 12)</td>
</tr>
<tr>
<td>Supply Pneumoconiosis Medical Examination (Art. 7〜11)</td>
<td>Giving notice of determined classification of Pneumoconiosis Management (Art. 16〜19)</td>
</tr>
<tr>
<td>Determination of Pneumoconiosis Management Classification (Art. 12〜20)</td>
<td>Shift Work (Art. 26, 27) Exemption from shift work benefits. (Art. 29)</td>
</tr>
<tr>
<td>Measures for Health Care (Art. 20-2〜23)</td>
<td></td>
</tr>
</tbody>
</table>

* Asbestos-related work (Appendix No. 24 of the Enforcement Ordinance of the Pneumoconiosis Law), applicable to the Pneumoconiosis Law, means disentangling, combing drags, spinning, weaving, spraying and loading or unloading of asbestos, or laminating, sewing up, cutting off, polishing and finishing the asbestos-containing products or work at the packaging site.

### 1.5 Outline of the Air Pollution Control Law, Enforcement Ordinance and Regulations

*Ministry of the Environment*

The Air Pollution Control Law (abbr.: APCL) intends to control soot and smoke etc., which factories/facilities emit and to protect the nation's health from air pollution as well as maintain people's living environment. Chart 4 outlines the laws etc. related to demolition etc. of asbestos-containing buildings and construction materials in APCL.

### Chart 4. Outline of The Air Pollution Control Law, Enforcement Ordinance and Regulations about the work of demolition of buildings and structures that contain asbestos.

<table>
<thead>
<tr>
<th>The Air Pollution Control Law</th>
<th>Clean Air Act Enforcement Ordinance</th>
<th>Enforcement Regulations of The Air Pollution Control Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions of the &quot;Specified Dust&quot; (Art. 2-9)</td>
<td>The “Specified Dust” Asbestos (Art.2-4)</td>
<td></td>
</tr>
</tbody>
</table>
| The Specified Building Materials (Art. 2-12) | Sprayed Asbestos  
*Attn. (Art.3-3, No.1)  
Asbestos-containing Insulating Materials,  
Lagging Materials and Refractory Investment Materials (Preceding No.1 shall be excluded) (Art. 3-3, No.2) |  |
| The "Specified Dust" Asbestos (Art.2-4)  
Specified Dust Generation Work (Art. 2-12) | Building demolition work in which the specified building materials are used (Art. 3-4, No.1)  
Reconstructing or repairing work of buildings in which the specified building materials are used (Art. 3-4, No.2) |  |
| Customer's consideration to the specified work (Art. 18-19) | Notification of the Specified Dust Generation Work etc. (Art. 10-4) |  |
| Notification of the Specified Dust Generation Work etc. (Art. 18-15)  
*Notification at least 14 days prior to the beginning is required. | Work Standards of Specified Dust Generation etc. (Art. 18-14) | Installation of a message board while the specified dust generation etc. work is under operation (Art. 16-4 No.1)  
Measures (Art. 16-4 No.2, Appendix 7)  
*When operate works scraping, cutting and fracturing materials: Insulation, negative-pressure, HEPA, filter-tipped negative-pressure, dust collector / exhauster, wetting, etc. (Appendix 7-1)  
In the case scraping, cutting and fracturing materials are not operated: Curing, wetting, etc. (Appendix 7-2) |

Attn.) The sprayed asbestos defined in the Air Pollution Control Law: sprayed asbestos, sprayed asbestos-containing rock wool, sprayed asbestos-containing vermiculite and sprayed asbestos-containing pearlite.

**Application of the Air Pollution Control Law concerning Specified Dust (Asbestos)**

1) The molded boards, which do not fall under the category "specified building materials", do not apply. However, obligations to keep asbestos materials wet, measures for restricting access to authorized personnel only, etc. shall be required according to the Asbestos Disability Prevention Rules.

2) This law shall not apply in the case where the relevant materials to be demolished are dealt with without actually touching them.

3) In the case where the relevant materials to be demolished are handled using glove bags. Glove bags shall be deemed more effective than insulation measures.
The Waste Management and Public Cleansing Law (abbr.: the Waste Management Law) intends to conserve people's living environment as well as improve public health through such measures as appropriate waste control and keeping/ensuring a clean living environment. According to the Waste Management Law, industrial waste is distinguished between "general industrial waste" and "industrial waste subject to special control".

Asbestos-containing wastes which fall under the category of "industrial waste subject to special control" shall be/are "sprayed asbestos" which are removed from buildings or construction materials (asbestos-containing sprayed materials), asbestos-containing lagging material, asbestos-containing heat insulation and asbestos-containing fireproof material. Chart 5 outlines the waste materials which are defined as "waste asbestos etc." in the Waste Management Law, Enforcement Ordinance and Regulations.

Chart 6 outlines the molded pieces, such as asbestos-containing slate, vinyl floor tiles, etc. which were removed from buildings or construction materials, which shall be handled as "asbestos-containing industrial waste" of industrial waste (debris, glass waste, concrete waste, pottery waste, or waste plastic, etc.) Chart 7 outlines the manipulation of "asbestos-containing industrial waste" which arises from other occasions/in other cases.

**Chart 5. Outline of The Waste Management and Public Cleansing Law, Enforcement Ordinance and Regulations concerning Asbestos Disposal**

<table>
<thead>
<tr>
<th>The Waste Management and Public Cleansing Law</th>
<th>Enforcement Ordinance</th>
<th>Enforcement Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions of the “specified control industrial waste” (Art. 2 Sec. 5)</td>
<td>Waste Asbestos etc. (Art. 2-4 Sec. 5)</td>
<td>Extent of the “waste asbestos etc.” (Art. 1-2 Sec. 7)</td>
</tr>
<tr>
<td>Storage Standards “storage standards of specified control industrial waste” (Art. 12-2 Sec. 2)</td>
<td>“Storage standards of specified control industrial waste” (Art. 8-13)</td>
<td></td>
</tr>
<tr>
<td>Control System “specified control industrial waste management representative” (Art. 12-2 Sec.6)</td>
<td>Management representative of specified control industrial waste (Art. 8-17)</td>
<td></td>
</tr>
<tr>
<td>Equipment accounts and reports (Art. 12-2 Sec.12)</td>
<td>Account items etc. should be recorded by Employers (Art. 8 - 18)</td>
<td></td>
</tr>
<tr>
<td>Entrust a specified expert for disposal (Art. 12-2 Sec. 3)</td>
<td>Entrust a specified expert for disposal (Art. 6-5, 6)</td>
<td>Entrust a specified expert for disposal (Art. 14,15,16,16-2, 3, 4)</td>
</tr>
<tr>
<td>The industrial waste control documentation (manifest) (Art.12-3)</td>
<td>Delivery of industrial waste control documentation (manifest) (Art.8-20, 21)</td>
<td></td>
</tr>
</tbody>
</table>

Attn.) "Waste asbestos etc." shall be

(1) The sprayed asbestos (asbestos-containing sprayed rock wool, asbestos-containing sprayed vermiculite, asbestos-containing sprayed perlite), asbestos-containing lagging material, asbestos-containing heat insulation, asbestos-containing fireproof materials, instruments/tools) used for removing in buildings etc. under "asbestos construction materials removal project".

(2) The waste shall be defined as wastes which collected at the projects' dust collection facilities emitting specified dust shall be equipped and instruments/tools used with.

* At the final disposal site, drawings of the place where the “waste asbestos etc.” were buried should be recorded. (Art. 12-11-2 of the Regulations of the Waste Management Law)
### Chart 6. Outline of The Waste Management and Public Cleansing Law, Enforcement Ordinance and Regulations about ‘Asbestos-Containing Industrial Waste’

<table>
<thead>
<tr>
<th>The Waste Management and Public Cleansing Law</th>
<th>Enforcement Ordinance</th>
<th>Enforcement Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions of “Industrial Waste” (Art. 2 Sec. 4-1)</td>
<td>Glass waste, concrete waste and pottery waste (Art. 2-1 Sec. 7), debris (Art. 2-1 Sec. 9)</td>
<td>Asbestos-containing industrial waste (Art. 7-2-3)</td>
</tr>
<tr>
<td>Storage Standards “Standards of Industrial Waste Storage“ (Art. 12 Sec.2)</td>
<td>“Standards of Industrial Waste Storage“(Art. 8 No.4) * Labeling that there is “Asbestos-containing industrial waste.” * Measures for “asbestos-containing industrial waste”: Prohibit from getting mixed in with other materials and prohibit exhalation of dust.</td>
<td></td>
</tr>
<tr>
<td>The Control System: “industrial waste management representative” (Art. 12-2 Sec. 6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment accounts and reports (Art. 12 Sec.11)</td>
<td>Items etc employers shall be keep recording in accounts (Art. 8 - Chart 5 -Remarks)</td>
<td></td>
</tr>
<tr>
<td>Entrust to a specified expert for disposal (Art. 12 Sec. 3)</td>
<td>Entrust to a specified expert for disposal (Art. 6 No.1, No.2, No.3)</td>
<td>Entrust to a specified expert for disposal (Art. 8-2, 3)</td>
</tr>
<tr>
<td>The industrial waste control documentation (manifest) (Art.12-3)</td>
<td>Delivery of industrial waste control documentation (Art.8-20 No.3, Art. 8-21 No.11) * The contents that are included in “asbestos-containing industrial waste” and the quantity shall be described in the manifest.</td>
<td></td>
</tr>
</tbody>
</table>

Attn.) The “asbestos-containing industrial waste” shall be industrial waste as the result of new construction, re-construction or remove of construction materials (including buildings), and those waste (excluding “waste asbestos”) contains more than 1% of asbestos.  
* At the final disposal site, the "asbestos-containing industrial waste" shall be buried at a fixed place and the amount of wastes shall be recorded and also a chart showing the exact place they are buried shall be kept. (Regulations Art. 12-11-2 Sec. 1-6, Sec. 2)

<table>
<thead>
<tr>
<th>The Waste Management and Public Cleansing Law</th>
<th>Enforcement Ordinance</th>
<th>Enforcement Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions of “Industrial Waste” (Art. 2 Sec. 4-1)</td>
<td>Glass waste, concrete waste and pottery waste (Art. 2-1 Sec. 7), debris (Art. 2-1 Sec. 9)</td>
<td>Asbestos-containing industrial waste (Art. 7-2-3)</td>
</tr>
<tr>
<td>“Standards of Industrial Waste Storage” (Art. 12-1 Sec.2)</td>
<td>“Standards of Industrial Waste Storage” (Art. 8)</td>
<td></td>
</tr>
<tr>
<td>The Control System: “industrial waste management representative” (Art. 12-2 Sec. 6)</td>
<td>Entrust to a specified expert for disposal (Art. 12-2 Sec. 3)</td>
<td>Entrust to a specified expert for disposal (Art. 8-2, 3)</td>
</tr>
<tr>
<td>The industrial waste control documentation (manifest) (Art.12-3)</td>
<td>Delivery of industrial waste control documentation (Art.8-20, 21)</td>
<td></td>
</tr>
</tbody>
</table>

1.7 The Building Standards Law (Ministry of Land, Infrastructure, Transport and Tourism)

To comply with the Building Standards Law, it is necessary to enforce the following restrictions etc. to prohibit the use of “flyable” asbestos-containing building material. However, as for the agent to be used for encapsulation, the performance requirements are established and notification was given. (Ministry of Land, Infrastructure, Transport and Tourism - Notification No. 1168 in 2006)

1) As for the sprayed asbestos and the asbestos-containing sprayed rock wool, in the case where building extension, reconstruction or major repair/remodeling is done, the items related to sprayed asbestos and the asbestos-containing sprayed rock wool shall be removed.
   - The floor area of building extension or reconstruction is larger than 1/2 of the previous area: Removal
   - The floor area of building extension or reconstruction is smaller than 1/2 of the previous area: Removal, encapsulation or enclosure.
   - In the case where major repair/remodeling is conducted: Removal, encapsulation or closure

2) In the case where asbestos fibers may become airborne, the authorities concerned issue recommendation/order, implement debriefing/on-the-spot surveys, or spot checks etc. under the periodical report systems.

1.8 The Building Lots and Buildings Transaction Business Law & Enforcement Regulations (Ministry of Land, Infrastructure, Transport and Tourism)

According to the "Building Lots and Buildings Transaction Business Law" as well as the "Enforcement Regulations", in the case of building contracts, such as buying and selling, exchanging or borrowing and lending, then the results and contents of previous asbestos surveys in the relevant buildings shall be provided in written form.
1.9 The Construction Waste Recycling Law (Ministry of Land, Infrastructure, Transport and Tourism)

Currently, there is no asbestos products which comply with “specified building materials” defined in the Construction Waste Recycling Law, exist. However, if asbestos products get mixed in with the “specified building materials”, recycling the materials will be unfeasible. Therefore, when demolishing etc. buildings etc., complete segregation of asbestos-containing products is absolutely required.

1.10 The Housing Quality Security Promotion Law (Ministry of Land, Infrastructure, Transport and Tourism)

The “dwelling performance labeling system” has been enacted to comply with Housing Quality Security Promotion Law and researching procedures for existence or nonexistence of asbestos and also measuring procedures of asbestos dust concentration inside of a room (No concentration level has been established) are regulated based on the sprayed materials used in the existing houses.

2. Major Regulations about demolition of asbestos-containing buildings and structures

Chart 8 outlines the closely related regulations on demolishing, repairing and grinding work (referred to as “demolishing etc.”) of asbestos-containing buildings/construction materials (referred to as buildings etc.).

Also, references related to demolishing etc. are given below:

“Guidelines of prior diagnosis administration for asbestos used existing buildings”
(Japan Asbestos Association, March 2008 Revision)

“Visual Asbestos Building Materials”
(“Ministry of Land, Infrastructure, Transport and Tourism” HP)

“Asbestos-containing Materials/Products Database, March 2007 Issue”
(HP of “Ministry of Land, Infrastructure, Transport and Tourism” & “Ministry of Economy, Trade and Industry”)

“A manual to prevent asbestos exposure during demolition etc. of bildings”
(Japan Construction Occupational Safety and Health Association, February 2007 Revision)

“A Manual to prevent asbestos exhalation during demolition etc. of bildings”
(Japan Association for Working Environment Measurement, June 2007 Revision)

“Technical guidelines to prevent dust exhalation of sprayed asbestos in existing buildings”
(The Building Center of Japan, September 2006)

“Administrative guidelines for building repair work, 2007 Issue”
(Building Maintenance & Management Center, Revision is expected in December 2007)

(Public Buildings Association, July 2006)

“A Manual for Scrapping Asbestos-containing Waste etc.”
(Waste Management and Recycling Department, Minister’s Secretariat of Ministry of Environment; Expected the issue in October 2007)
The Waste Management Law, Enforcement Ordinance and Regulations

Definitions of ‘Industrial Waste’ (Art. 2, item 4-1)
Glass waste, concrete waste and pottery waste (Art. 2, item 7)
Waste plastics (Art. 2-1, item 13)
‘Storage Standards of Industrial Waste’ (Art. 12-1, item 2)
Storage Standards of Industrial Waste (Art. 8)
Control System ‘industrial waste management representative’ (Art. 12, item 4)
Entrust a specified expert for disposal (Art. 12-2, item 3)
Entrust a specified expert for disposal (Art. 6-1, Art. 6-2, Art. 6-3)
Entrust a specified expert for disposal (Art. 8-2, 3)
Industrial Waste Control Documentation (Manifest) (Art. 12-3)
Delivery of Industrial Waste Control Documentation (Art. 8-20, 21)

Chart 8. Work breakdown comply with major rules etc. related to demolishing of asbestos-containing products

<table>
<thead>
<tr>
<th>Work Breakdown</th>
<th>Rules and Regulations</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Work related to scrapping etc. of sprayed materials 1) | The Industrial Safety and Health Law & Enforcement Order and the Ordinance on Industrial Safety and Health | (1) Providing Medical Examinations etc.  
(2) Prior Notification of Removal Work  
(Art. 88 of the Industrial Safety and Health Law, 14days before workers remove asbestos) *2  
(3) Displaying name of operation chief etc. |
| Asbestos Disability Prevention Rules (Level 1) |                                                                                         | (1) Inspect and record descriptions, for example places etc. where asbestos-containing building materials are used.  
(2) Preparation of work plan  
(3) Prior Notification of Work  
(Before the beginning of work)*3  
(4) Restrict as “authorized personnel only”  
(5) Off-limit to workers except those in charge of removing asbestos (In the case where there is no asbestos cutting in an enclosed space)  
(6) Isolation of worksites (Except no asbestos cutting in an enclosed space.)  
(7) Appoint of operation chief at works  
(8) Provide special education/training  
(9) Signs/Notices, etc. (Keep Out, Asbestos Worksites, No Food or Beverages, No Smoking)  
(10) Use Respirators / Wear Work Outfits  
(11) Measures for asbestos etc. (keeping asbestos materials wet)  
(12) Prevention of Exhalation during Transportation  
(13) Work Record (Records shall be kept for 40 years after the worker has stopped/finished the relevant work)  
(14) Asbestos Medical Examinations Records  
(Records shall be kept for 40 years after the worker has stopped/finished the relevant work.) |
| The Air Pollution Control Law • Clean Air Act Enforcement Ordinance • Regulations for enforcement of the Air Pollution Control Law | Work of scraping, cutting and fracturing materials: | (1) Prior notification of removal work (14 days prior to the beginning of work)  
(2) Compliance with work standards (HEPA attached air exhaust, medication usage, isolation, etc.) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In the case excluding the above works:</td>
<td>(1) Compliance with work standards (curing, medication usage, cleanup etc.)</td>
<td></td>
</tr>
</tbody>
</table>
| The Waste Management and Public Cleansing Law, Enforcement Ordinance and Regulations | | (1) Disposal Standards of ‘Asbestos Waste etc.’ as specified control industrial waste  
(Appointment of “specified control industrial waste management representative”, preparation of manifest, keeping accounts, etc.) |
| Work related to demolition etc. of lagging material, heat insulation and fireproof materials. | The Industrial Safety and Health Law & Enforcement Order and the Ordinance on Industrial Safety and Health | (1) Providing Medical Examinations etc.  
(2) Displaying name of operation chief etc. |
| Asbestos Disability Prevention Rule (Level 2) | (1) Inspect and record descriptions like places etc. where asbestos-containing building materials are used.  
(2) Preparation of work plan  
(3) Working Notification (Prior to the beginning of work)  
(4) Restrict as “authorized personnel only”  
(5) Off-limits to workers except those in charge of removing asbestos  
(6) Appoint Operation Chief at works  
(7) Provide special education/training  
(8) Signs/Notices, etc. (Keep Out, Asbestos Worksites, No Food or Beverage, No Smoking)  
(9) Use Respirators / Wear Work Outfits  
(10) Measures for asbestos etc. (keeping asbestos materials wet)  
(11) Prevention of Exhalation during Transportation  
(12) Work Record (Records shall be kept for 40 years after the worker has stopped/finished the relevant work)  
(13) Asbestos Medical Examination Records (Records shall be kept for 40 years after the worker has stopped/finished the relevant work) |
| The Air Pollution Control Law • Clean Air Act Enforcement Ordinance • Regulations for enforcement of the Air Pollution Control Law | Work of scraping, cutting and fracturing materials | (1) Prior notification of removal work (14 days prior to the beginning of work)  
(2) Compliance with work standards (HEPA attached air exhaust, medication usage, isolation, etc.) |
<p>| In the case excluding the above works: | (1) Compliance with work standards (curing, medication usage, cleanup etc.) |</p>
<table>
<thead>
<tr>
<th>Demolition Work etc. of molded boards etc.</th>
<th>The Industrial Safety and Health Law &amp; Enforcement Order and the Ordinance on Industrial Safety and Health</th>
<th>The Waste Management and Public Cleansing Law, Enforcement Ordinance and Regulations</th>
</tr>
</thead>
</table>
| | (1) Providing Medical Examinations etc.  
(2) Displaying name of operation chief etc. | (1) Disposal Standards of ‘Asbestos Waste etc.’ as specified control industrial waste  
(Appointment of “specified control industrial waste management representative”, preparation of manifest, keeping accounts, etc.) |
| Asbestos Disability Prevention Rule (Level 3) | | (1) Inspect and record descriptions, for example places etc. where asbestos-containing building materials are used.  
(2) Preparation of work plan  
(3) Appoint of operation chief at works  
(4) Restrict as “authorized personnel only”  
(5) Provide special education/training  
(6) Signs/Notices, etc. (Keep Out, Asbestos Worksites, No Food or Beverages, No Smoking)  
(7) Use Respirators / Wear Work Outfits  
(8) Measures for Asbestos etc. (Keeping asbestos materials wet)  
(9) Prevention of Exhalation during Transportation  
(10) Keep Working Records (for 40 years after the worker has stopped/finished the relevant work.)  
(11) Keep Asbestos Medical Records (for 40 years after the worker has stopped/finished the relevant work.) |
| The Waste Management and Public Cleansing Law, Enforcement Ordinance and Regulations | | (1) Disposal Standards of Asbestos-Containing Industrial Waste (least controlled landfill site, manifest, segregation from other waste materials) |

1) Including encapsulated/enclosed worksites due to a threat of scattering of sprayed asbestos etc. because of deterioration etc. and the fact that workers may be exposed to asbestos dust.

2) In the case where removal work of sprayed asbestos, asbestos-containing sprayed lock wool, asbestos-containing sprayed vermiculite and asbestos-containing sprayed pearlite for buildings fireproof/semi-fireproof being performed.

3) In the case where removal work of sprayed asbestos, asbestos-containing sprayed lock wool, asbestos-containing sprayed vermiculite and asbestos-containing sprayed pearlite excluding for buildings fireproof/semi-fireproof being performed, as well as in the case of encapsulation/enclosure worksites due to a threat of scattering of sprayed asbestos because of deterioration etc. and the fact that workers may be exposed to asbestos dust.