Amendment to Enforcement Order of Industrial Safety and Health Law

For the prevention of occupational diseases caused by asbestos, the Japanese government have decided to amend the Enforcement Order of Industrial Safety and Health Law (ISHL). This amendment aims to prohibit manufacture, import, use and transfer of asbestos-containing products that have non-asbestos alternatives.

I Circumstances

All kinds of asbestos including chrysotile are classified as Group-1 substance (carcinogenic to humans) by International Agency for Research on Cancer (IARC), and widely recognized as the substance causing mesothelioma and pulmonary fibrosis.

Not a few countries, especially European countries, have already prohibited or decided to prohibit using asbestos within few years. (For example, Germany in 1993, France in 1996, U.K. in 1999, Australia in 2001 and EU in 2005)

In 1995, the Japanese government have prohibited manufacture, import, use and transfer of amosite and crocidolite under the provision of ISHL to prevent occupational diseases, because they had alternatives at that time.

The other asbestos except amosite and crosidolite have not been prohibited because of their durability for heat and corrosion, and the difficulty for replacement to non-asbestos alternatives. These asbestos are only allowed to be used under severe restrictions such as the equipment of local exhaust ventilation and the use of respirator masks.

However, in consideration of recent development of alternative substances for these asbestos-containing products, the government formed “the Technical Committee on Substitution for Asbestos” consisting of technical experts reviewing the possibility of asbestos-containing products replacement under the policy that all asbestos-containing products should be prohibited except products considered to be unavoidable for industrial and public safety. The report of the committee was completed on March in 2003.

II Outline of the Report

1 . Range of asbestos-containing products which can be replaced

Basis of the consideration to decide the possibilities of substitution for asbestos-containing products are as listed as below.

(1) Decision should be made at product category level, not at specific product one.

(2) Not only products containing substitute fibers but also non-fiber products, such as metal products, should be considered as alternative products

(3) Products described below should be decided as difficult to be replaced.

ⅰ. Asbestos-containing products whose substitution may threat industrial safety

ⅱ. Asbestos-containing products whose alternatives don't exist, or are considerably inferior in quality to asbestos-containing products and may cause socially unacceptable problems

2. Possibility of substitution for construction materials

(1) Extruded cement panel

Its substitution is considered to be possible because of the reasons described below.

- Replacement to non-asbestos alternative is technically possible because non-asbestos alternatives are already on the market.
- Manufacturers and users don't recognize these asbestos-containing products as indispensable.
- There is no specific reason for the use and manufacture of these asbestos-containing products for industrial safety.

(2) Decorated cement shingles for dwelling roofs

Its substitution is considered to be possible because of the reasons described below.

- Replacement to non-asbestos alternative is technically possible because non-asbestos alternatives are already on the market.
- Manufacturers and users don't recognize these asbestos-containing products as indispensable.
- There is no specific reason for the use and manufacture of these asbestos-containing products for industrial safety.

(3) Fiber reinforced cement boards

Although some manufactures may need adjustments of their facilities, raw materials and process of production, its substitution is considered to be possible because of the reasons described below.

- Replacement to non-asbestos alternative is technically possible because non-asbestos fiber reinforced cement boards are already on the market and non-fiber alternatives, such as metal products, can

be used as substitute products.

- The amendment to the related Japanese Industrial Standard (JIS) is expected to promote the substitution.
- Users don't recognize the use of these asbestos-containing products as indispensable to keep industrial safety.
- There is no specific reason for the use and manufacture of these asbestos-containing products for industrial safety.

(4) Fiber reinforced cement sidings

Its substitution is considered to be possible because of the reasons described below.

- Replacement to non-asbestos alternative is technically possible, because non-asbestos alternatives are already on the market.
- Users don't recognize the use of these asbestos-containing products as indispensable.
- There is no specific reason for the use and manufacture of these asbestos-containing products for industrial safety.

(5) Asbestos cement pipes

Its substitution is considered to be possible because of the reasons described below.

- Replacement to non-asbestos alternative is possible, because non-asbestos alternatives such as metal products and enamel products, are already on the market.
- Users don't recognize the use of these asbestos-containing products as indispensable.
- There is no specific reason for the use and manufacture of these asbestos-containing products for industrial safety.

3. Possibility of substitution for non-construction materials

(1) Adhesives for insulator

Its substitution is considered to be possible because of the reasons described below.

- Replacement to non-asbestos alternative is technically possible, because non-asbestos alternatives are already on the market.
- Manufacturers and users don't recognize the use of these asbestos-containing products as indispensable

(2) Thermal, electrical insulating sheets

Although some asbestos-containing products may be replaced by non-asbestos alternatives, such as ceramic products, a part of the products need to use asbestos in order to keep industrial safety. It is difficult to distinguish the replace-possible products from the replace -impossible products by the conditions such as its temperature and machines used.

(3) Compressed fiber jointing and seals

Although some asbestos-containing products may be replaced by non-asbestos alternatives, such as graphite products, a part of the products need to use asbestos to keep industrial safety. It is difficult to distinguish the replace-possible products from the replace-impossible products by the conditions such as its temperature and machines used. Substitution of these products needs time for the development of non-asbestos alternatives, the examination of its durability and the adjustment of machines and facilities used.

(4) Other asbestos-containing products

ⅰ Friction materials for brake and clutch

Its substitution is considered to be possible because of the reasons described below.

- Manufacturers and users don't recognize the use of these asbestos-containing products as indispensable
- Brakes and clutches used for automobiles, trains, cranes, elevators and escalators have been already replaced or decided to be replaced in near future.

ⅱ Asbestos cloth and asbestos thread

The possibility of replacement of these products depends on the replacement of sealing materials, because these materials are mostly used as or processed into the sealing materials.

III Prohibition of asbestos-containing products

Based on the proposal of the report, the government have decided to add the asbestos-containing products listed below to the materials of which manufacture, import, use and transfer are prohibited in order to protect the Japanese workers health. These prohibitions are also done in Germany, France, the UK, Australia, and some EU nations. Therefore, the Japanese government recognizes the prohibition as appropriate from the international viewpoint.

1. Extruded cement panel
2. Decorated cement shingles for dwelling roofs
3. Fiber reinforced cement boards
4. Fiber reinforced cement sidings
5. Asbestos cement pipes
6. Adhesives for insulator
7. Friction materials for brake and clutch