

4

Thailand as an asbestos-free society

Although not attracting as much public attention over the past year as political and economic issues, the conflict over the ban on asbestos use in Thailand was an all-out fight where both those advocating for and those opposing the ban used mass mobilisation techniques, scientific discourse and presentations on the positive and negative consequences of the ban to support their positions. Without the public as audience however, the aspiration to become an asbestos-free society in Thailand remains distant.



What is asbestos and what is it for?

Asbestos is a naturally-occurring inorganic mineral with an appearance of long thin fibrous crystals that can be divided into two groups: (1) the Amphibole group such as Crocidolite, Amosite and Anthophyllite that have straight needle-like crystals; and (2) the serpentine group such as Chrysotile and that have rope-like curly crystals composing of mini-fibers.

Asbestos has good qualities such as strength, flexibility and resistance to tensile pressure, heat, acid, alkali and other chemicals which make it desirable for many industrial products including roofing tiles, ceiling insulation, brake pads and clutches, fire-retardant clothes, cement pipes and insulation materials. In Thailand, imported asbestos usually falls into the serpentine group, generally Chrysotile, whose flexibility allows it to be made into a large surface.¹

Asbestos in Thai Industries

Thailand has imported both Crocidolite and Chrysotile since 1975. When the Hazardous Substance Act B.E. 2535 (1992) came into force, Crocidolite was classified under the third category of hazardous substances prohibited from being imported, manufactured, exported or possessed unless authorised by the Ministry of Industry's Department of Industrial Works. According to statistics, Thailand imported 181,348 tonnes of asbestos in 2002 or 3.3 kilogrammes per person.² In 2010, Thailand imported 79,250 tonnes of asbestos, ranking the world's No. 6 behind only China, India, Russia, Indonesia and Uzbekistan. The combined consumption of these six countries accounts for 78% of global consumption of asbestos.³

Originally, asbestos was used in five brands of roofing tiles: namely Diamond, Olarn, Siam Cement Group (SCG), Super and Five Rings.⁴

However, between 2007 and 2010, SCG and Mahaphant Fiber Cement Co, Ltd, owner of the Five Rings brand, stopped using asbestos in their products this reducing asbestos import by 50–60,000 tonnes per year.⁵ Currently only Olarn and Diamond brands continue to use asbestos in their roofing tiles.⁶

Towards an Asbestos-Free Society

Chrysotile has been used in industries since the 19th century because of its ability to strengthen industrial products. However, a person who has been exposed to asbestos fibers for 15–30 years can develop diseases such as lung cancer, mesothelioma and peritoneal cancer.⁷ More than a century later, 52 countries banned the use of asbestos due to the increased awareness of its hazard. In Thailand, a similar movement has been mobilised by NGOs working in health, consumer protection and labour rights issues through forums such as the National Health Assembly.

The Third National Health Assembly endorsed the strategic goal of making Thailand an asbestos-free society on December 17th 2010 and submitted related recommendations to the Cabinet. On April 12th 2011, the Cabinet approved in a resolution to prohibit the import of Chrysotile and certain products containing Chrysotile which can be substituted by other materials or products. The Department of Industrial Works was assigned to draft a master plan for the ban of asbestos import and manufacturing of asbestos within five years in five groups of products, namely: smooth tiles, rubber flooring tiles, brake pads and clutches, asbestos-cement pipes and roofing tiles. The Department of Disease Control in collaboration with the Ministry of Interior's Building Control Bureau is tasked with informing local administrative organisations about the removal, repair and renovation of buildings with asbestos-containing construction materials.⁸

However, the Cabinet resolution did not result in a concrete manufacturing and import ban. Instead, it was taken by businesses as a signal to hoard asbestos. The amount of 2011 import jumped to 81,411 tonnes from 79,250 tonnes the previous year.⁹

The opposition to the ban by the asbestos-related industry further delayed its implementation by the Ministry of Industry. Industry claimed that although the Cabinet approved the ban on asbestos use within 2012, it did not lay down a definite timeframe and the ban may have been too rushed without a balanced impact study with inputs from different agencies.

Pongthep Jaruampornpan, acting Secretary General of the Department of Industrial Works, said that: *“The impact study found that some countries issued a comprehensive ban, while others banned only certain products. The reasons for the bans also vary regarding political, economic and durability issues.”*¹⁰

A rumour that the government may delay the ban for another 3–5 years prompted the Thailand Ban Asbestos Network to advocate a ban on production, sale and import of Chrysotile-containing products by 2013, starting from five groups of products, namely: smooth tiles, rubber flooring tiles, brake pads and clutches, asbestos-cement pipes and roofing tiles.¹¹

Asbestos?

The key to the debate lies in the health impact of asbestos. Information from the WHO, the International Agency for Research on Cancer and the International Labour Organization clearly shows that all forms of asbestos are carcinogenic thus causing lung cancer, pharyngeal cancer, ovarian cancer, silicosis, pleural thickening and pulmonary edema. Even exposure to a small amount of asbestos can cause a disease. Around

the world, 125 million people are exposed to asbestos and every year around 107,000 people die from asbestos-related lung cancer.¹²

Sugio Furuya, coordinator of the Japan-based Asian Ban Asbestos Network, cited the 2012–2016 WHO–Thailand Collaborative plan which stated that as the world’s No.4 importer of asbestos¹³, Thailand would face health burdens and massive expenses in the future, especially related to illnesses amongst construction workers who are most exposed to the material.

Between 2008 and 2011, Thailand had two mesothelioma patients hospitalised in the Central Chest Institute of Thailand. Both had history of working for decades in factories with exposure to asbestos.¹⁴

Attributing the disease to asbestos exposure, however, is difficult because of the long incubation period and lack of national statistics. The Bureau of Occupational and Environmental Diseases estimates that if Thailand doesn’t ban asbestos use, there will be 1,137 patients per year in the next 25–30 years.¹⁵ In addition, the country’s lack of physicians specialised in occupational health makes it impossible to prove the cause of disease when workers are diagnosed with lung cancer, thus leaving the employers with impunity from their negligence.¹⁶

Harmless Asbestos?

On the other hand, the opposite side of the debate, led by Olarn Tile Company, with academic support from the Chrysotile Information Center, actively lobbies against the ban by submitting letters to the Prime Minister, holding seminars, organising foreign “study tours” for the media and threatening academics against disseminating negative information on the health risks of asbestos.¹⁷



This group argues that Chrysotile poses no risks because it cannot withstand the acidity of human body and that its half-life of only 15 days means that there's no accumulation in the lung. The main argument lies in the fact that there is no clear scientific evidence to show that Chrysotile is the direct cause of mesothelioma. In addition, it is argued that 90% of manufactured Chrysotile is used in the cement industry where the mixture with cement will change its chemical structure and stop it from spreading by air. If used properly, asbestos therefore allegedly has no negative impact on health.¹⁸

A Chrysotile Research Center study¹⁹ entitled "Social and Economic Impact of a Chrysotile ban" conducted by Huang Ingwei, head of Assumption University's Department of Business Economics, shows that Thailand imported more than 3.2 million tonnes of Chrysotile between 1985 and 2010, 90% of which was used in the roofing tile industry. A Chrysotile ban and removal of all Chrysotile-containing roofs would cost the

country 450.97 billion baht. This amount would increase to 464 billion baht if pig farms, schools and hospitals were to be included in the ban. The study also cites the case of the US where a ban was later lifted because of the lack of evidence to link Chrysotile as cause of mesothelioma. It concludes that the government should appoint a working group to study the overall impact of a ban.²⁰

This call against the ban was echoed by the National Pig Breeders Association, Pheu Khunatham Foundation, Bangkok Metropolitan Community Network and the network of people impacted by the ban who insisted that Chrysotile posed no negative health impact.

Dr. Somchai Bowornkitti, a respiratory expert at Siriraj Hospital, said that over the 30 years that asbestos has been imported for industrial use in Thailand, there have been 36 cases of mesothelioma reported in the country. However, none of them have been scientifically confirmed as caused by asbestos exposure.²¹

Asbestos-Free Society but Only On Paper

The debate on asbestos' health impact continues, even though the April 2012 Cabinet resolution already laid down appropriate steps. In its second paragraph, the Cabinet approved the approach to ban the import of Chrysotile and certain Chrysotile-contain products as well as prohibiting the manufacturing of Chrysotile-containing products where other materials or products could provide a substitute.

However, the Ministry of Industry chose to implement only paragraph 3 of the Cabinet resolution, that is, to produce a plan to ban the import, manufacturing and sale of asbestos and all asbestos-containing products. The Ministry commissioned Chakkrit Siwadechathep, from Sukhothai Thammathirat Open University's Faculty of Health Sciences, to study and draft a plan to that effect. It also gave a 3–5 years grace period before a permanent ban came into effect depending on product categories²² as follows:

1) **Rubber flooring tiles**—Year 1–2 for research and development, ban comes into effect in Year 3.

2) **Smooth tiles**—Year 1–2 for new product development, Year 3 new technology to take over using paper pulp and PVA.

3) **Roofing tiles**—some manufacturers already stopped using asbestos whilst others have a five-year grace period. Year 1–2 for research and development, Year 3, ban comes into effect, Year 3–5 for development of asbestos-free small tiles and Year 5 a complete ban.

4) **High-pressure or cement pipes**—Year 1–2, 25% reduction, Year 3, 50% reduction, Year 4, 75% reduction and Year 5 a complete ban.

5) **Brake pads and clutches**—Year 1–2, research and development for replacement materials, by the end of Year 2, ban comes into effect for asbestos in brake pads and clutches for motorcycles and passenger cars, Year 3–5, research and development for trucks and buses and by end of Year 5, a complete ban.

This postponement by the ministry disappointed those who supported an immediate ban. Health-related agencies and organisations, in collaboration with civil society and academics, launched a campaign to disseminate information about asbestos' hazards and health impacts.

The government attributed the delay to the volatile political situation this *“making it impossible to get the Ministry of Industry to issue a ban within this year. However, Suranan Vejjajiva, Secretary to the Prime Minister's Office, has ordered the Ministry of Industry to look into the issue again due to its harm to health. Besides, there's the fact that several companies have already stopped using it.”*²³

Even as the debate on health hazards of asbestos rages on with evidence from both sides being put forward, Thai society seems to have chosen and started to walk on the path to becoming an asbestos-free society.

