

International Transfer of Asbestos Industry to Asian Locations

Moderator: Barry Castleman

For more than one hundred years, the asbestos industry has been conducted on a global scale. European and American asbestos manufacturers bought asbestos mines in Africa and Canada, operated cartels to fix prices and divided worldwide markets. Research discussed in the *Case Report of the International Trade of the Asbestos Industry in Asia* by Professor Takehiko Murayama indicated that Japanese asbestos companies also took a long-term pan-national strategic approach to asbestos manufacturing which encouraged overseas diversification, increasing contact with major foreign competitors [83] and the transfer of hazardous technology to less developed countries [84]. Japanese investment in companies which were presumed to use asbestos in developing countries rose consistently between 1969 and 2001; even as mobilization of the ban asbestos movement was gathering pace in Japan, there was a record number of overseas asbestos investments [85].

Recent visits by Korean and Japanese researchers to Korean-owned asbestos production units in Indonesia revealed that the dumping of hazardous production was continuing and that the same asbestos technology which had been used first in Japanese and then in Korean factories had been exported to Indonesia; people in Jakarta reported that machinery from Jeil Asbestos was being sent to China. Accompanying the transfer of asbestos production

was the transfer of risks to workers and residents living in proximity to factories which had standards of occupational safety and health approximating Japan's in the 1960s and Korea's in the 1970s. A diagram illustrating the typical national process of going from asbestos use to asbestos ban was exhibited by the speaker, who urged governments to accept the responsibility of intervening in the time-consuming process and prevent the international transfer of the asbestos hazard by banning asbestos.

Dr. Dong-Mug Kang, Dr. Zulmiar Yanri and Yeyong Choi, members of the same research team as the previous speaker, provided more information on the findings. In the presentation *Joint Case Study: Exposure Survey of Nichias [86] Textile Factories in Japan, Korea and Indonesia*, Dr. Kang, from the Korea Research Center for Asbestos-Related Diseases, School of Medicine, Pusan National University, detailed a field study carried out on August 26-28, 2008 in Cibinong, Bogor, Indonesia to assess current occupational exposure levels and environmental exposures outside the premises of an asbestos factory which was consuming 612 kilograms/day of asbestos. Mean airborne asbestos levels associated with production processes were: 8.6 f/cc mixing, 7.3 f/cc carding, 7.5 f/cc spinning, 3.9 f/cc twisting, 3.1 f/cc weaving and 4.3 f/cc winding [87], while average asbestos concentrations for



Joint research team, Indonesia, August 2008

personal and regional air monitoring were 5.7 f/cc and 2.4 f/cc, respectively. Asbestos was identified in soil samples within 100 meters of the factory while 5 meters from the factory the distribution of airborne asbestos varied from 0.154 f/cc to the south, 0.067 f/cc to the west, 0.016 f/cc to the east and 0.001 f/cc to the north [88]. These differences were explained by the prevalence of a northeast wind. As there was no legislation regulating hazardous asbestos exposures in Indonesia, the research findings showing substantial occupational and environmental exposure generated by this factory were grounds for concern.

Dr. Zulmiar Yanri from the National Occupational Safety and Health Center, Indonesia discussed the results of lung function and chest X-rays taken from at-risk individuals in Cibinong [89]. Out of a total of 265 workers, 101 (38%) were tested; of the 50,000 people living within 500 meters of the factory, 95 were examined. The results were as follows:

- high levels of lung abnormalities were detected among the asbestos workers and local residents which might have been caused by asbestos exposure; among these subjects, the levels of diagnosed lung disease were 100 times the national average!
- 43% of workers with more than 11 years of employment had lung abnormalities; workers in the warehouse and mixing department were at highest risk [90];
- the results of spirometric testing showed that 56% of the residents had lung abnormalities; community members had a higher rate than workers!

To clarify these results, further research was needed.

Yeyong Choi of the Citizens' Institute for Environmental Studies and the Ban Asbestos Network Korea discussed the background to the project and its sociological findings in his paper: *Dangerous Trades, Dangerous Neighborhood*. The 21+ members of the project staff came from Indonesia, Japan and Korea and included 10 doctors (some of whom worked for the government), six academics, three journalists and two environmentalists. As well as conducting air monitoring, soil testing and medical examinations, research efforts in 2008 included interviews with key personnel including:

- factory workers who confirmed the hazardous conditions which existed at the worksite and the lack of personal protective equipment, engineering controls and medical check-ups; the abysmal state of the workplace was confirmed by direct observation;
- Takeshi Sugihara, President of P. T. Nichias Rockwool Indonesia who said that since March 2007, Nichias had stopped using asbestos following a decision taken at Nichias headquarters;
- staff at the nearest private hospital to the Cibinong asbestos factory (RS. Bina Husada); they knew nothing



Asbestos textile production at PT Jeil Fajar factory

about the local asbestos textile factories and nothing about asbestos-related diseases;

- staff at the nearest public hospital (Badan Rumahsakit-daerah Cibinong); they also knew nothing about the local asbestos textile factories and nothing about asbestos-related diseases. They agreed that asbestos education was a priority not only for hospital staff but also for local government officials.

Having detailed the extensive efforts that had been made to track the spread of the asbestos industry throughout

Schoolday exposures to Nichias asbestos experienced by Japanese children in the cities of Nara and Korean children in Busan had resulted in high levels of illness ...

Asia, the speaker showed a photograph of an Indonesian worker holding a baby; the worker was wearing a blue work shirt with the PT Jeil Fajar logo. Not only was the child being exposed to his father's contaminated work clothes but he – like 50,000 other people – was being exposed to the high levels of asbestos permeating the neighborhood [91]. Within 500 meters of the PT Jeil Fajar asbestos factory were many schools: 12 kindergartens, 12 elementary schools, 7 middle schools and 7 high schools – a total of 10,000 students. It was not known how many more schools were within 2 kilometers. Schoolday exposures to Nichias asbestos experienced by Japanese children in the cities of Nara and Korean children in Busan had resulted in high levels of illness; in decades to come, Indonesian children in Cibinong would be similarly affected. Although international organizations, regional bodies and national governments had important roles to play in ending Asian asbestos trafficking, the results of this collaborative research project showed what could be achieved when asbestos victims, environmental activists and trade unionists worked together.

Considering the ubiquity of asbestos use throughout Asia and the fact that Brazil is one of the world's biggest producers, there could be little doubt that Brazilian exports would find their way to Asian countries. Data quantifying



Inspecting an illegal asbestos shipment, Brazil

this toxic trade were included in Engineer Fernanda Gian-nasi's presentation *Brazilian Asbestos Exports to Asia* [92]. Brazil was, the speaker confirmed, the world's 4th largest asbestos producer, a major exporter and a big consumer. The multinational companies that owned the asbestos business in Brazil for more than 50 years sold their interests to national businessmen who were engaged in a ruthless and aggressive campaign to silence opponents and protect domestic markets. Despite their best efforts, annual asbestos consumption in Brazil had been declining. In order to compensate for lost domestic sales, the Brazilian asbestos lobby had worked closely with other stakeholders to target markets in developing countries. Following the precedent set by Canada, Brazil was exporting increasing amounts of its annual production; 65-70% (~290,000 tons) of exports were being sold to Asian and Latin American countries, most of which had few, if any, health and safety regulations. According to government data, 74% of raw asbestos fiber exports went to Asia; shipments to Thailand, Brazil's biggest overseas customer, accounted for 25% of all sales, with other exports going to India (23%), Indonesia (17%), Iran (7%), Malaysia and Sri Lanka [93]. The fact that asbestos vested interests had defeated the categorization of chrysotile as a hazardous substance under the Rotterdam Convention meant that these exports were being sent without any prior informed consent notification.

an escort team would be required to see the convoy to the state border as asbestos was classified as a dangerous and prohibited material.

Under Brazilian asbestos labor regulations, manufacturers must notify the government about asbestos use, trade, transport and production. An investigation by the Labor Ministry revealed that a company which had been registered as producing asbestos-cement flowerpots was involved in exporting raw fiber to Asia from a port in São Paulo State. The fact that there was now a statewide asbestos ban in São Paulo meant that the transit of this shipment through the state to the port as well as the export of this cargo were

illegal; the export of this cargo was blocked. Other asbestos shipments awaiting dispatch at the port – one of which was destined for India – were discovered by port authority officials and customs agents; these shipments were also embargoed. A stalemate had been reached; 5,000 tons of asbestos at the docks could not be exported and the supplier – the SAMA chrysotile mine – did not want the asbestos back. The blacklisted shipments were currently taking up valuable space in the customs agents' yards. To return the asbestos to the mine would take 200 trucks 32 hours by road; an escort team would be required to see the convoy to the state border as asbestos was classified as a dangerous and prohibited material. Another option was to dump the embargoed material in landfills for dangerous waste, but these disposal sites were far away and expensive. For the time being, the impasse remained.

As was discussed by other speakers at the conference, multinational corporations have been responsible for negligent asbestos exposures not only in their home countries but also overseas. A recent test case has succeeded on behalf of an Australian resident employed by a New Zealand based company; exposure to asbestos was alleged by the employee during business trips to Europe and Asia. The defendant's application that Victoria was not the appropriate forum for such a claim was rejected. Australian Lawyer Maria McGarvie, said that despite the very unusual facts of the case, it might prove relevant to other non-Australian asbestos victims. In the presentation *Asbestos Claims against an Australian Multinational – The James Hardie Experience*, the speaker explained that the Puttick case would have limited application for Asian asbestos victims who worked for the Australian asbestos giant James Hardie at one of its Asian subsidiaries [94].

Whilst employed by the Fletcher company (1981-1989), Mr. Puttick was sent to visit asbestos factories in Belgium and Malaysia [95]. In 2001, he and his family moved from New Zealand to Victoria, Australia where he later contracted mesothelioma. Upon his death in 2005, the case was continued on behalf of his wife and surviving children. The Supreme Court and the Victorian Court of Appeal found that Victoria was "a clearly inappropriate forum" and stayed the proceedings. On November 12, 2008, the High Court of Australia reversed this finding in a unanimous decision. The High Court decision had allowed the Plaintiff, the widow and children of the late Mr. Puttick, to proceed with their substantive case for damages. This case was now proceeding before the Supreme Court of Victoria and given the procedural and factual peculiarities of the case it might be some time before it reached its final conclusion. Considering the widespread use of asbestos in Asia and the etiology of asbestos-related diseases, there was little doubt that the incidence of these diseases would rise throughout the region. Potential claimants in Australia might now be able to successfully pursue claims in this jurisdiction against defendants responsible for negligent foreign exposures.