WS-E-02 (Abridged presentation)

Implications of the Excessive Asbestos Related Disease Burden among Retrenched South African Miners Exposed to Chrysotile Asbestos

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[PowerPoint presentation submitted – authors could not attend]

Abstract

Chrysotile asbestos was mined in South Africa from the early part of the 20th century. African Chrysotile Asbestos (ACA), the biggest mine and mill, started operations in 1937 and closed in 2002. From 1975 to 1992 production of chrysotile in South Africa remained on average at 100,000 tons per year (with ACA contributing more than 90%) and declined to around 20,000 tons in 2000.

The number of workers employed at ACA in the 1960s and 1970s was between 2,000 and 2,600 at its peak. In the 1990s the numbers declined gradually and were reduced to about 250 by 2000. Annual average asbestos fibre level counts reported by ACA for the period 1977 to 1995 were below 1 fibre per ml with the exception of 1977 (2.5 fibres per ml), 1979 (2 fibres per ml) and 1983 (1.21 fibres per ml).

The National Union of Mineworkers (NUM) in South Africa, requested occupational medical practitioners to conduct audits of occupational health surveillance programmes at the ACA mine. The audit process of medical records, chest radiographs and lung function tests was completed prior to retrenched workers being repatriated to their homes, including to neighbouring countries Swaziland and Mozambique.

Between 1995 and 2000 the medical records, chest radiographs and lung function tests of more than 1,200 ACA asbestos mine-workers were assessed for asbestos related diseases. The prevalence of asbestos related diseases (ILO score >= 1/0) for the different evaluations varied between 21 and 36%. The findings are comparable to the high prevalence of pneumoconiosis (mainly silicosis and associated tuberculosis), reported by other investigators, among migrant workers from the Eastern Cape Province of South Africa (22-37%) and neighbouring Botswana (26-31%).

The findings of these audits suggests an enormous disease burden associated with exposure to chrysotile asbestos in spite of the recorded low fibre levels, and highlights the importance of worker organization in negotiating exit medical examinations of retrenched workers.

The information so obtained contributed to:

- *the revision of the exposure standard for asbestos due to the health risks associated with chrysotile asbestos;*
- *the inclusion of medical surveillance in the new asbestos regulations;*
- *the insertion of post-employment medical surveillance in retrenchment agreements negotiated by trade unions;*
- *heightening the impetus for civil litigation among asbestos exposed workers and community members.*

Extract from PowerPoint Presentation:

Msauli-chrysotile asbestos mill and tailings dump

Mining of Chrysotile:

- mining of chrysotile started in the Eastern part of South Africa around 1920;
- African Chrysotile Asbestos (ACA) – the biggest mine and mill – started operations in 1937;
- located in the picturesque Msauli valley near border with Swaziland;
- the Havelock – Bulembo Mine in Swaziland is a few kilometres away;
- ACA was the largest chrysotile mining operation;
- several smaller mines such as Kaapsche Hoop and Stella are nearby;

- extraction of asbestos from tailings dumps has continued into the 1990s in these smaller mines;
- the ACA mine discontinued underground operations in 2001 and the mill and other operations closed in 2002.

Chrysotile Production:

- from 1975 to 1992 production was about 100,000 tons per annum;
- contribution from ACA more than 95%;
- output declined from 101,892 tons in 1992 to about 20,000 in 2000;
- the decline in output was in part related to shrinking markets.

Workers Employed:

- workers employed at ACA included workers from Mozambique and Swaziland;
- the number of workers employed in the 1960s was about 2600;
- in the mid 70s to mid 90s there were between 1,500 to 2000 workers at ACA;
- from 1996 there has been a dramatic reduction, with only about 250 workers left in 2000;

Chrysotile Asbestos Research:

- limited research done on chrysotile induced asbestos diseases in South Africa;
- between 1995 and 2000 medical records, chest X-rays and lung function tests of about 1,200 ACA workers assessed for ARDs;
- done at the request of the National Union of Mineworkers (NUM) by Sophia Kisting and Mohamed Jeebhay.

Chrysotile Asbestos Research:

- prevalence of asbestos related diseases for the different evaluations varied between 22 and 36%;
- it is foreseen that a cohort of chrysotile exposed workers will be followed up in a future study.

Recorded Asbestos Fibre Levels:

- ACA made available asbestos fibre level counts for the period 1977 to 1995;

- besides 1977 (2.5 fibres per ml), 1979 (2 fibres per ml) and 1983 (1.21 fibres per ml), all recorded fibre levels were below 1 fibre per ml.

Chrysotile in Asbestos-cement Products:

- Everite, the company mainly responsible for asbestos-cement products in the country reported that they discontinued the use of any form of asbestos in their products in 2002;
- at the Parliamentary hearings in February 2003 the Everite spokesperson called for "a ban on asbestos and the import of asbestos products";
- currently asbestos-cement products are imported from Zimbabwe into South Africa.

Amended Asbestos Regulations

- the Department of Labour gazetted Amended Asbestos Regulations in 2001;
- these regulations are more in keeping with best practice internationally;
- already had a positive influence on health and safety in some sections of the construction and waste disposal industry;
- important is the establishment of an asbestos register.

Important Asbestos developments:

The Minister of the Environment and Tourism indicated in June 2004 that use of chrysotile asbestos for which there are alternatives, will be prohibited:

- this is in keeping with the 1998 Asbestos Summit decision to phase out use of chrysotile and exposed workers' litigation;
- in June 2003, the law firm Ntuli Noble and Spoor finalised an agreement with GENCOR and GEFCO for the establishment of an Asbestos Relief Trust into which the defendant companies will jointly pay more than R400 million;
- the chrysotile asbestos workers who worked at ACA are entitled to claim from the Trust for ARD;
- five Trustees have started the implementation of the Trust Deed and the payments started in September 2004.

Conclusion:

- in spite of numerous difficulties we have made considerable progress;
- communities are organising themselves into groups with a common purpose;
- we send our support and express solidarity with the workers and asbestos affected people in Japan;
- we look forward to ongoing international collaboration to celebrate our gains and to prevent the continued use of chrysotile.

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