

6 HISTORY OF ASBESTOS IN SOUTH AFRICA

6.1 HISTORICAL DEVELOPMENT

In the early years of the 20th century, asbestos deposits were found in South Africa and what is now Zimbabwe⁶². Asbestos mining in South Africa began in earnest in the 1930s. In the following decades, it attracted a multitude of big and small companies, and even individuals. In the early days, mining and production methods were crude, with the fibre being separated from the ore by hand. In some cases the "mines" were spade-and-wheelbarrow operations run by farmers who had found deposits on their land.

Two international mining groups, the Swiss Eternit Group, and the British-owned Cape Asbestos SA, and the South African-owned Griqualand Exploration and Finance Company (Gefco) were the major mining companies that were active in South African asbestos mining from the early 1940s to the late 1990s.

Asbestos mining peaked in the late 1970s when Gefco had four active mines, Eternit four and Cape two. In 1979, Eternit sold its asbestos mines to Rand Consolidated Properties who in turn sold out to Gefco in 1981. At this stage, after a long series of mergers and acquisitions, the number of major producers had been reduced to two companies: Gefco and Msauli Asbestos. Gefco produced the amphiboles crocidolite and amosite - commonly known as blue and brown asbestos - in the North-Western Cape and in the North-Eastern Transvaal, while Msauli produced chrysotile, or white asbestos, in the former KaNgwane homeland near Barberton. Ultimately, Gefco purchased Msauli, leaving only one active asbestos mining company in South Africa.

In 1988, Gefco disinvested from asbestos mining and sold its remaining mines, including Msauli, to management, who formed a company called Hanova Mining Holdings.

As a result of declining international demand, South African asbestos mines began closing towards the end of the 1970s. The first mines to close were the brown and blue asbestos mines in the early 1990s. The last white asbestos mines, Kaapsehoop (December 2001) and Msauli (September 2001), ceased mining operations in 2001.

6.2 NATURAL OCCURRENCE OF ASBESTOS IN SOUTH AFRICA

Asbestos deposits are found mainly in four regions of South Africa: the Northern Cape, the North-West Province, the Northern Province/Limpopo and Mpumalanga⁶³. Table 11 identifies the types of asbestos found in each of these regions.

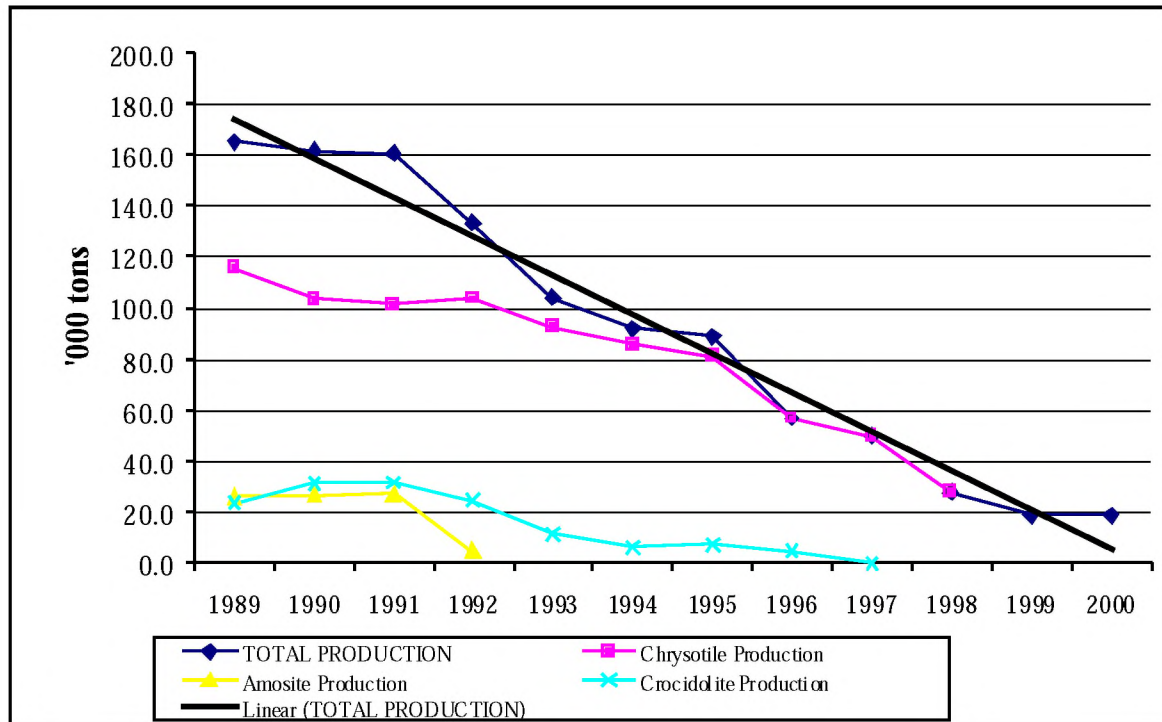
TABLE 11: SOUTH AFRICAN ASBESTOS DEPOSITS

REGION	TYPE OF ASBESTOS DEPOSITS
Northern Cape Griqualand West Prieska Kuruman	Crocidolite
North-West Province	Crocidolite
Northern Province Chuniespoort Group Pietersburg District Letaba District Steelpoort River Penge	Amosite Anthophyllite Crocidolite Tremolite
Mpumalanga Barberton Area	Chrysotile

6.3 SOUTH AFRICAN ASBESTOS MINING

Figure 4 depicts South Africa's asbestos mining production volumes of all types of asbestos for the twelve-year period from 1989 to 2000 period.

FIGURE 4: SOUTH AFRICAN ASBESTOS MINING PRODUCTION



This diagram indicates that there has been a dramatic decline in asbestos mine production in the past decade, down from 165,000 tons in 1989 to 18,800 tons in 2000. During this period, mining production of amosite and crocidolite stopped altogether, leaving only the mining of chrysotile asbestos.

Table 12 on the following page reflects South African asbestos mining output from 1989 to 2001. The figures have been obtained from official statistics provided by the Department of Minerals and Energy⁶³. The Local Sales, Imports and Local Usage figures from 2001 and 2002 have been obtained directly from the local and Zimbabwean mining operations.

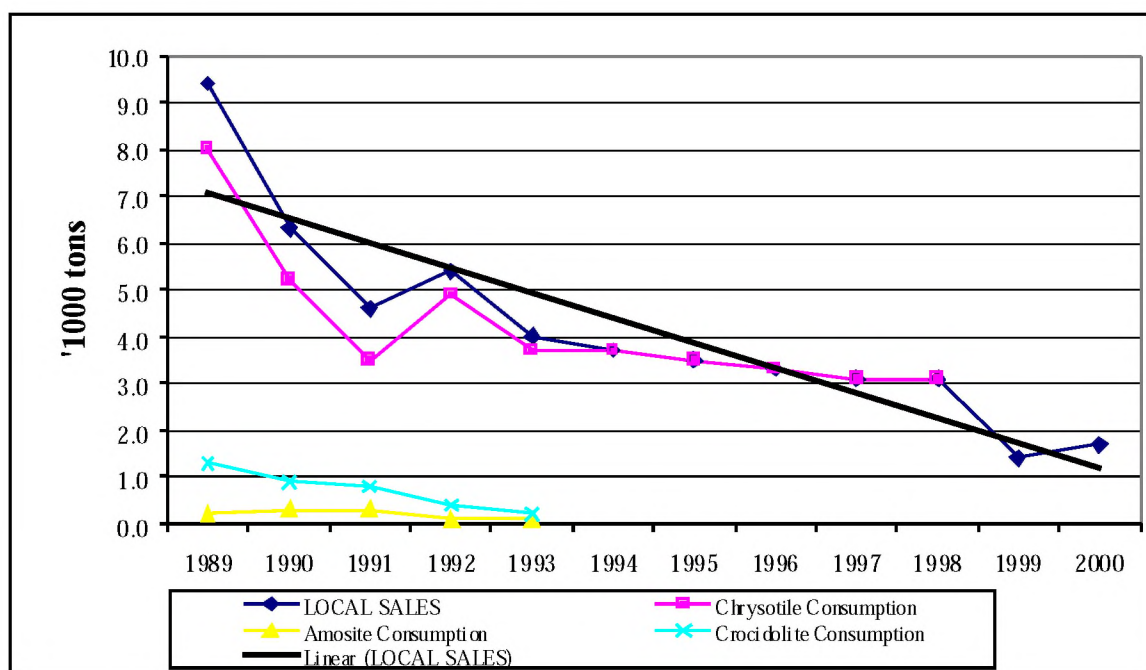
TABLE 12: SOUTH AFRICA ASBESTOS MINING OUTPUT ('000 TONS)

YEAR	PRODUCTION				LOCAL RSA SALES				EXPORTS				TOTAL IM PORTS	TOTAL LOCAL USAGE
	CHRYSTILE	AM OSITE	CROCIDOLITE	TOTAL	CHRYSTILE	AM OSITE	CROCIDOLITE	TOTAL	CHRYSTILE	AM OSITE	CROCIDOLITE	TOTAL		
1989	115.5	26.1	23.7	165.3	8.0	0.2	1.3	9.4	110.6	26.1	35.2	171.9		
1990	103.4	26.6	31.5	161.5	5.2	0.3	0.9	6.3	107.9	34.1	36.8	178.8		
1991	101.6	27.4	31.6	160.5	3.5	0.3	0.8	4.6	99.7	21.9	25.9	147.5		
1992	103.7	5.1	24.5	133.3	4.9	0.1	0.4	5.4	98.4	15.2	17.5	131.1		
1993	92.4		11.6	104.0	3.7	0.1	0.2	4.0	92.9	4.5	12.7	110.1		
1994	85.9		6.3	92.1	3.7			3.7	80.2		15.4	95.5		
1995	81.2		7.4	88.6	3.5			3.5	82.3		9.8	92.1		
1996	56.7		5.1	56.9	3.3			3.3	52.3		8.5	60.8		
1997	49.8		0.2	50.0	3.1			3.1	34.3		5.8	38.2	9.6	12.7
1998	27.8			27.8	3.1			3.1	23.9		1.0	24.9	7	10.1
1999				18.8				1.4				20.2	10.3	11.7
2000				18.8				1.7				16.6	9.3	11.0
2001								1.1				11.1	5.6	6.7
2002								0.8				5.1	5.44	6.2

6.3.1 Local South African Sales of Asbestos Fibre

Figure 5 reflects local South African sales of asbestos for the twelve-year period from 1989 to 2000⁶³.

FIGURE 5: LOCAL SOUTH AFRICAN ASBESTOS SALES

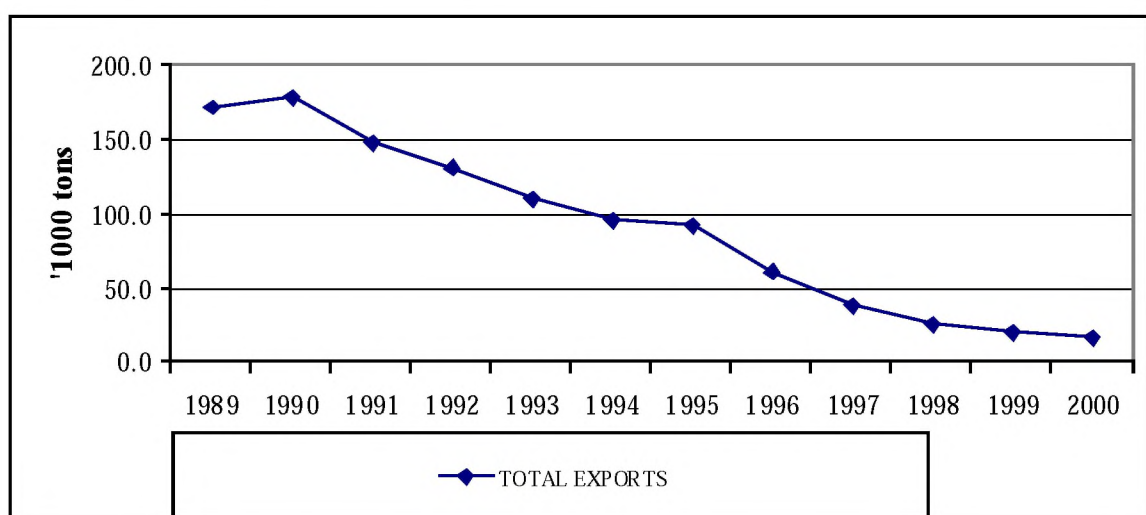


During this period, local sales of raw asbestos fibres declined from 9,400 tons to 1,700 tons in 2000. Amosite and crocidolite disappeared from the local market in 1993.

6.3.2 South African Asbestos Fibre Exports

Figure 6 reflects South Africa's asbestos export volumes for the period from 1989 to 2000⁶³.

FIGURE 6: SOUTH AFRICAN ASBESTOS FIBRE EXPORTS

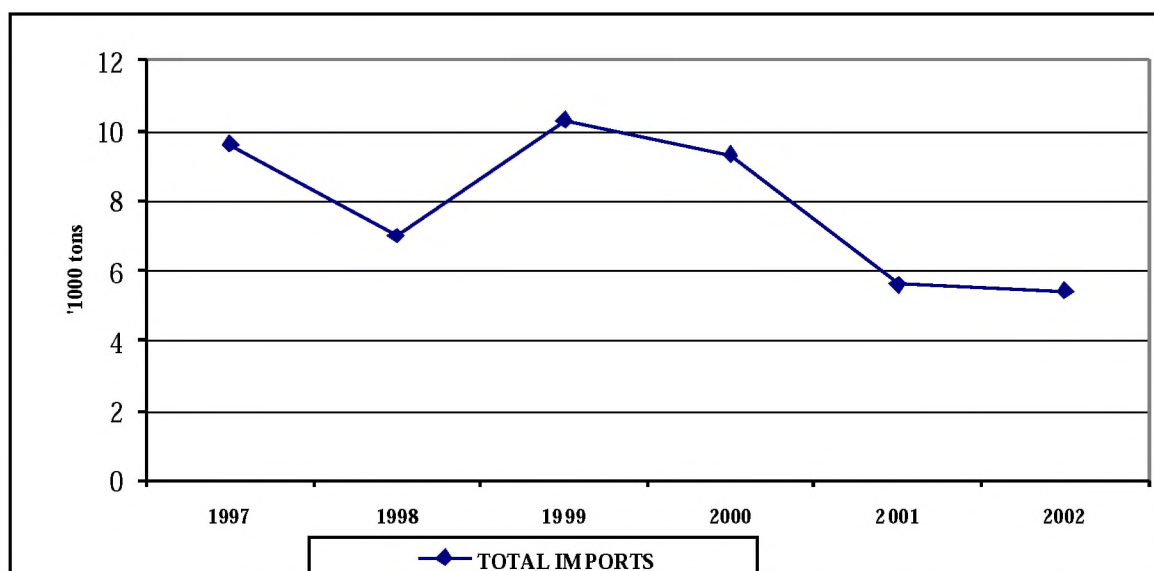


South African asbestos exports have also declined significantly, in line with the decline in mining production.

6.3.3 South African Asbestos Fibre Imports

All of South Africa's raw asbestos fibre is imported from Zimbabwe – SA imports approximately 4% of Zimbabwe's asbestos exports. South Africa's imports of raw asbestos fibres have declined from just over 10,000 tons in 1999 to just over 5,000 tons in 2002. Figure 7 reflects this trend.

FIGURE 7: SOUTH AFRICAN ASBESTOS FIBRE IMPORTS



6.4 THE CURRENT STATUS OF SOUTH AFRICAN ASBESTOS MINING

Before the closure of Penge in 1992, South Africa's asbestos industry was unique in that it mined all three principal varieties of asbestos: amosite, chrysotile and crocidolite⁶⁴. Crocidolite was first mined in South Africa in 1893. Chrysotile mining/production followed about a decade later, and amosite started in the early 1930s.

Amosite mining/production stopped in 1992, while crocidolite mining stopped in 1989. Chrysotile mining ended with the closure of the Msauli Mine on the Swaziland border in 2001. Two smaller operations are still recovering asbestos particles from mine dumps in Mpumalanga.

Table 13 reflects the current status of asbestos mining in South Africa.

TABLE 13: THE CURRENT STATUS OF ASBESTOS MINING IN SOUTH AFRICA

TYPE OF ASBESTOS DEPOSITS	MINING/PRODUCTION STATUS
Crocidolite	Stopped in 1989
Crocidolite	Stopped in 1989
Amosite	Stopped in 1992
Anthophyllite	Stopped in 1989
Crocidolite	Stopped in 1989
Chrysotile	Stopped in 2001

6.4.1 Current Operations

Currently, there is a stockpile of chrysotile asbestos fibre at the Msauli mine near Barberton. Table 14 reflects sales figures for the January to August 2000 to period from this source.

TABLE 14: M SAULI 2002 SALES

	EXPORTS		LOCAL RSA SALES	
	VOLUME (TONS)	VALUE (US\$)	VOLUME (TONS)	VALUE (SAR)
January	178	45,435	160	213,628
February	380	82,405	144	244,288
March	417.5	84,186	118.3	203,294
April	260	54,445	90.7	179,204
May	870	155,591	40	85,000
June	710	118,686	63.5	132,518
July	545	97,019	52.3	113,528
August	355	77,093	26.1	56,836

Table 15 reflects the remaining stockpile tonnage at this location as at the end of August 2002, along with an estimate of the number of months that it will take to sell off these remaining stocks, calculated at the average monthly sales for the first eight months of 2002.

TABLE 15: CHRYSOTILE ASBESTOS STOCKPILES

LOCATION	STOCKPILES (TONS)	SELLING PERIOD
Msauli	6,768	12.28 months

This calculation implies that Msauli will continue to sell asbestos until September 2003.

6.4.2 Employment

Currently, there are three partners (all of whom are retired) and four staff members employed at Hanova's head office.

The Msauli mine in Barberton employs 20 people who are working on closing down and rehabilitating the mine. At this stage, it is anticipated that these people will remain in Hanova's employ until the end of June 2003.

6.4.3 Investment

Hanova's assets include R40 million cash, and approximately R15 million in mining equipment at Msauli. These assets are frozen, pending the outcome lawsuits brought against the company.