AN OVERVIEW OF SOUTH AFRICA’S
PRIMARY INDUSTRIAL MINERAL
IMPORTS AND EXPORTS, 2003

DIRECTORATE: MINERAL ECONOMICS
AN OVERVIEW OF SOUTH AFRICA’S PRIMARY INDUSTRIAL MINERAL IMPORTS AND EXPORTS, 2003

DIRECTORATE: MINERAL ECONOMICS
DEPARTMENT OF MINERALS AND ENERGY

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FOREWORD

The purpose of this report is to review South African industrial mineral imports, exports and trade patterns.

May 2003

N VAN AVERBEKE
Director
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EXPALANATORY NOTE

International callers convert national telephone numbers as indicated in the example below:

• (011) 339 4414

+27 11 339 4414
INTRODUCTION

Industrial minerals comprise a highly diverse group of often neglected, though vitally important, minerals that are used in a variety of applications ranging from everyday products to highly sophisticated, space age materials. Industrial minerals production in South Africa ranges from high value commodities, such as dimension stone and vermiculite, to low value, high volume extractive materials, such as sand and aggregate, and include numerous medium value commodities, such as clays, limestone, magnesite, magnetite, diatomite, silica and mineral sands. Many industrial minerals are low-priced commodities when compared with most metals, and are sold in bulk, making their economic exploitation highly dependent on transport costs and distance to markets. The main end-user markets for industrial minerals are the agricultural, construction, chemical, metallurgical and pigment sectors, which account for most local purchases of industrial minerals. South Africa’s chemical industry is the largest in Africa and contributes about 5% of gross domestic product.

SOUTH AFRICA’S INDUSTRIAL MINERAL SECTOR

South Africa’s industrial mineral sector’s contribution to GDP continues to decrease, despite the fact that South Africa’s industrial minerals control a significant share of the international market for particular products. The low value of South Africa’s industrial minerals is to some extent a result of what minerals have been included in the sector - a matter of definition, as well as the small size of the markets in which South Africa is dominant.

Industrial minerals are generally accepted to be non-metallic ores. In South Africa the definition includes what may elsewhere be classed as “construction material”, such as raw materials for cement, as well as dimension stone, sand and aggregate. Minerals such as chromite and ilmenite, of which considerable quantities are used in the chemical and pigment industries, stibnite (antimony ore), which is used in the form of antimony trioxide in flame-retardants, and manganese dioxide, used in the manufacture of batteries, have been excluded from this sector and included with base metals. This is in the process of being changed and as a result a significant increase in industrial mineral sales will occur.

The industrial mineral sector’s contribution to GDP is a poor, even misleading, measure of the sector’s importance. The picture is even more distorted if one realizes that many companies mining these resources pass the mineral products to related sister companies, usually at cost, where value is added or they are used in other manufacturing processes. In such cases the mines are regarded as sources of material and not profit centres.

Unlike gold and base metals, which are seen as final products, industrial minerals are seen as intermediate products or consumables that are used to manufacture other products. Industrial minerals are playing a large, though seldom recognised part in the creation of high value goods. Sand, aggregate, lime and limestone have in the past made up about a third of the sales of the industrial mineral sector, which has been experiencing declining sales for almost ten years.
South Africa is well endowed with relatively large reserves of a range of industrial minerals, but it is notably short of good quality limestone and high-grade kaolin. Of some 55 minerals mined in South Africa, 30 are classified as industrial. Raw materials for use in construction, such as sand, aggregate and cement grade limestone occur widely and are seldom traded on worldwide basis.
In spite of the fact that South Africa is situated a long way from the world’s major industrial centres, the country relies particularly heavily on the developed nations in the area of foreign trade. Imports are essential for industrial growth, and exports provide a necessary source of income and foreign exchange to pay for imports. A large percentage of South Africa’s exports are made up of raw materials, reflecting the abundance of natural resources in this country. Most of South Africa’s imports, on the other hand, consist of manufactured goods. South Africa imports relatively few raw materials.

It is essential that South Africa exports a greater variety and greater volumes of manufactured goods, as this will enable the country to develop a strong and varied industrial base. South African trade in industrial minerals is mainly with countries such as Europe, Middle and near East, Pacific Rim Countries, North and Central America South America and Africa. Export destinations for most of our industrial minerals are Pacific Rim countries, such as China, Hong Kong, Japan. These countries are highly industrialised and rely heavily on industrial minerals. The, which is commonly used in exports, is the US Dollar.
During 2001 South Africa’s industrial mineral sales revenue totalled R 4.5 billion, of which R 3.1 billion was from local sales, and R 1.5 billion from exports. Compared with 2000, South Africa’s local sales of industrial minerals increased by 6.6 percent from R 2.8 billion to R 3.1 billion in 2001. Industrial minerals local earnings now constitute 12.1 percent of all local primary mineral earnings. Four commodity groups accounted for more than 62 percent of all local sales, namely, aggregate and sand (26%), limestone and dolomite (30%), phosphate rock (data confidential) and sulphur (6%).

Although larger groups like Alpha, Lafarge, Phalabora (Vermiculite), Foskor, Richards Bay minerals, Bayer (chem. chromite), and Imerys (andalusite), beneficiate many of their raw materials, smaller groups and companies also carry out mineral beneficiation. The smaller industrial mineral producers are often labour intensive and exploit relatively smaller mineral deposits, which are not economically attractive to larger groups.
Local sales of primary industrial minerals

Local sales are increasing steadily and show a sustainable growth pattern. This reflects increasing, albeit slowly, industrial manufacturing, and together with governments planned increase in infrastructural development, bodes well for the industrial mineral sector. Beneficiation and the depreciating exchange rate are responsible for the increase in local sales in 2001.

Exports

Exports play a vital role in the economic development of many countries. In South Africa, a number of companies in the mining sector have geared their entire operations to exports, because the local market is too small to support a viable enterprise. Other capital intensive industries such as pulp and paper and chemicals have periodic production surpluses when they install additional plant to meet future domestic needs. These surpluses tend to be exported and in practice these companies remain almost continuously in international markets. Long-term exports enable a company to expand in order to achieve a more economic production level.
South Africa’s primary industrial mineral exports have gradually increased over the past five years from R 1,1 billion in 1997 to R 1,5 billion in 2001 with a slight 3 percent dip in 2000. Industrial mineral exports as percentage of total mineral sales decreased from 31.7 percent in 2000 to 32.5 percent in 2001, mainly due to increased exports of other minerals, rather than a real decrease in industrial mineral exports.

The value of industrial mineral export sales in 2001 increased by 10.2 % in rand terms, which in dollar terms represents a 11,0 percent decrease compared with 2000. Over and above the normal supply and demand conditions, the rand price of exports benefited from higher international commodity prices and the lower external value of the rand. Export increases should further assist the economy in the attainment of healthy growth levels.

Exports made up 32.5 percent of total sales. Five commodities contributed considerably more than 63 percent to the export revenue of R1, 5 billion. Granite (46%), phosphate rock (data withheld), fluorspar (data withheld), andalusite (8.8%) and vermiculite (8.5%).

There was enhanced export growth following the decline in the value of the rand, and anticipated economic revival in the global economy that is expected to gather speed in 2003. Most of the growth in the value of South Africa’s foreign trade can be attributed to the lower exchange rate of the rand, with imports being replaced by local products.

Most of the sector’s exports in 2001 went to Europe, South Asia, East Asia, North America, Latin America and Africa. Emerging markets are seen as an important target for South Africa’s industrial minerals. Other notable trends contributed to South Africa’s increased exports into Africa, with countries such as Tanzania becoming attractive to South African mining groups and suppliers. Furthermore, peace in Angola and the rebuilding of that country’s economy should open opportunities for increased industrial mineral exports. South Africa is maintaining a positive trade balance with the rest of Africa.
The following exported primary industrial minerals showed significant changes in 2001:

**Limestone**

Over a two-year period, exports of lime and lime products have decreased by 72 percent, to a new low of 12kt, attributable to the low ferrochrome production at Zimbabwe Alloys, a major importer of these products. Other export markets such as the sugar, gold and copper industries, which require lime products, have been similarly negatively affected by the political instability in Zimbabwe. Increased cement exports to neighbouring countries partly compensated for the reduced lime exports.

**Phosphate rock**

Exports of phosphate rock have decreased by 29 percent, and it is intended to stop all exports of this commodity during the next year or two. Phosphoric acid is an intermediate stage in the conversion of phosphate rock to fertilisers, and will be the base form of fertiliser related export from South Africa.

**Asbestos**

All asbestos mines have closed in South Africa. There is only one mine left, which is selling from stockpiles. The closure of asbestos mines is responsible for a 41 percent decrease in asbestos exports in 2001. Zimbabwe’s asbestos mining company and asbestos cement manufacturers are capitalising on South Africa’s decision to phase out the use of asbestos. A number of South African builders continue to use roofing and ceiling panels containing asbestos fibre and available from Zimbabwe.

**Feldspar**

Exports of feldspar increased by 65 percent, mainly as a result of across-border trade to Indian Ocean islands and SADC countries.

**Sulphur**

Elemental sulphur is a by-product of the oil and gas industry and exports of sulphur in all forms increased by 81 percent, attributable to higher global energy demand with most going to neighbouring countries.

**Vermiculite**

Chinese exports to Europe and USA are increasing and this competition is responsible for a 21 percent decrease in South African vermiculite exports.

**Fire Clay**

Fire clay exports decreased by 100 percent, attributable to the fact that it is a high bulk, low volume commodity, which is uneconomical to transport over large distances. Only one or two producers export fireclay, on a seasonal demand basis, to neighbouring countries.

**Kaolin**

South African kaolin is not of adequate quality for specialised processes such as paper coatings, as rheological properties are poor and iron contamination is generally high. In South Africa only one producer exports kaolin, and because of depreciating exchange rate in 2001 was able to export cheaply. Kaolin exports increased by 151 percent in 2001.
SOUTH AFRICA’S INDUSTRIAL MINERAL EXPORT EARNINGS, 2001

<table>
<thead>
<tr>
<th>COMMODITY</th>
<th>RAND MILLION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension stone</td>
<td>677.7</td>
</tr>
<tr>
<td>Fluorspar</td>
<td>100.2</td>
</tr>
<tr>
<td>Vermiculite</td>
<td>125.0</td>
</tr>
<tr>
<td>Andalusite</td>
<td>130.0</td>
</tr>
<tr>
<td>Other</td>
<td>310.3</td>
</tr>
</tbody>
</table>

* Other includes phosphate rock, asbestos, sulphur, pyrophyllite, limestone, special clays, mica, feldspar, gypsum, silica, magnesite, salt, mineral pigments and talc.

Total sales of primary industrial minerals

![Bar chart showing sales in Rands from 1997 to 2001](attachment:image)

Total industrial mineral sales for 2001 increased by 8 percent to R 4.5 billion, but decreased by 13 percent in dollar terms as a result of the deteriorating exchange rate.
South Africa lacks resources of certain basic industrial minerals such as salt, soda ash, sulphur, potash, certain abrasives, magnesia, talc, graphite and good quality kaolin.

**Imports of primary industrial minerals**

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports in '000 Rand</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>387</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>397</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>407</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>417</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>427</td>
<td></td>
</tr>
</tbody>
</table>

Sulphur, phosphate rock, magnesite and magnesia, kaolin, asbestos and perlite accounted for 90.4 percent of industrial mineral imports in 2001.

**The Following imported primary industrial minerals showed significant changes in 2001:**

**Sulphur**

In 2001 sulphur production amounted to 388 kt and R 287 kt were sold locally at a value of R 1819 million. Imports of sulphur amounted to 687 kt at the value of R1076 million. The 687 kt imports of sulphur include sulphur of all kinds other than sublimed sulphur, precipitated sulphur and colloidal sulphur. 74 percent of imported sulphur came from Canada and 25 percent from Saudi Arabia, with the balance was from countries such as Belgium, Germany, India and Korea.

**Phosphate rock**

Production of phosphate rock amounted to 2420 kt and local sales totalled 2591 kt. Imports decreased by 49 percent to a low of 172 kt, due to Foskor’s decision to increase production of both phosphate rock and phosphoric acid. Foskor, as with other bulk transporters, were plagued by problems with Spoornet. The phosphate market suffered from depressed prices during 2001, as a result of oversupply and weak demand. 99.8 percent of our phosphate imports were from Togo, with the balance from China, Uganda and United States.

**Graphite**
South Africa does not produce natural graphite. Imports of graphite amounted to 1.9 kt at a cost of R 76 million. Two forms of natural graphite were imported, powder and flake. 48 percent of natural graphite imports in both forms was from Zimbabwe, 29 percent from China and 23 percent from Switzerland, Madagascar, United Kingdom, South Georgia and the United States.

**Iron Pyrite**

In 2001 South Africa produced 150 kt of iron pyrite as a by-product from gold mining. Total imports of iron pyrite amounted to 0.5 kt at a cost of R10 million. 68 percent of imports were from Zimbabwe. 17 percent from Italy and 11 percent from Austria with the balance from Germany and Zambia.

**Gypsum**

In 2001 South Africa produced 382 kt of gypsum at the value of R176 million, all of which was sold locally. Imports of gypsum decreased by 32 percent to a low of 1.7 kt at a cost of R 20 million. 75 percent of gypsum imports were from Germany, 21 percent from Spain with insignificant amounts from the United Kingdom and Italy. Demand for gypsum depends principally on the strength of the construction industry. Road building and repair will continue to spur gypsum consumption in the cement industry. Synthetic gypsum, generated by various industrial processes, is becoming very important as a substitute for natural gypsum in wallboard manufacturing, cement production and agricultural applications. In South Africa, the source of synthetic gypsum is phosphogypsum (landfill, wallboard, soil amendment, ammonium sulphate), which is a by-product from the fertiliser industry. Another form of synthetic gypsum is industrial gypsum, which is known as gypfill. Gypfill is calcium sulphate dihydrate (CaSO$_4$.2H$_2$O).

**Natural abrasives**

South Africa does not produce natural abrasives. 1,09 kt of natural abrasives at the cost of R118 million were imported in 2001, 21 percent up on imports in 2000. The main imports were in the form of pumice (irregular lumps and crushed) and garnet. The pumice was sourced from Turkey.

70 percent of the imported garnet was from Zimbabwe, 17 percent from Australia and insignificant amounts from Spain, France and Italy.

**Alumino Silicates**

The only refractory grade alumino-silicate produced in South Africa is andalusite, of which is the world’s greatest supplier. Andalusite production totalled 193 kt, of which 46 kt were sold locally for R 454 million and 133 kt to the value of R130 million, were exported.

**Other clays**

Other clays include Ball clay, flint clays, fire clay, monolochite, halloysite and all clays from montmorillonite group excluding bentonite. In 2001 1.4 kt of other clays were imported at the value of R 55 million. Imports of other clays decreased by 48 percent because of depreciating exchange rates, which went up by thirty percent in 2001. That caused the imports to be very expensive. We also had a problem of dumping, were a Namibian producer sell their products very cheap in South Africa mostly for the absorbent industry (cat litter products, industrial spill clean up). South African producers are also actively looking at ways to improve import substitution. As part of cost reduction, manufacturers processes raw material. In that case imports are kept at minimum. 39 percent of other clays imports were from US, 21 percent was from Germany, 13 percent from United Kingdom and 12 percent was France. Other insignificant amounts were from countries such as China, India and Italy.

**Salt**

In 2001 salt production amounted to 356 kt, and local sales to 425 kt to the value R 770 million. According to the revenue services, salt imports decreased by 49 percent in 2001 to a low of 30 kt to the value of R38 million.
South Africa has increased imports of salt from SADC countries, Namibia and Botswana, which belong to a common customs union. Revenue services do not report imports from within the SADC. Previously the paper industry imported salt only from Australia. Recently SADC salt suppliers have been accepted by the paper industry as having salt of suitable quality, and as being reliable suppliers. This has led to a situation where total imports are not recorded. In addition to lack of import statistics, SADC salt is being sold in South Africa at lower prices than in the country of origin. Technically this should be viewed as ‘dumping’, and is posing a serious problem to local salt producers.

**Slaked lime**

Due to a current shortage of white lime (available lime content 72-75 percent) in South Africa, it is imported from countries as far afield as Spain and France. In 2001 imports decreased slightly by 6 percent from 8,2 kt in 2000 to 7,7 kt in 2001. Several municipal water treatment plants have resorted to using alternative material such as soda ash, calcium hydrate and partial brown lime to limit their exposure to white lime price hikes and scarcities. There are only two producers of white lime in South Africa, one of which currently imports vast quantities of burned limestone and beneficiates it further in South Africa. Several South African municipalities and manufacturers import white lime directly. Soda ash and potash imports have increased inversely as white lime imports have decreased. 87 percent of slaked lime imports was from France and the remaining 13 percent from United Kingdom, Bahamas and Malaysia.

**Quartz**

In 2001 special purpose quartz imports rose by 73 percent to 1,0 kt, to the value of R20 million. These figures probably include quartzite dimension stone but the greater portion is piezo-electric quartz and very pure SiO$_2$ used in certain specialised glass and for other purposes.

52,9 percent of quartz was imported from Zimbabwe, 44,9 percent was from Germany and insignificant amounts were from Netherlands and China.

100 percent of our crude or roughly trimmed quarzite was imported from Tanzania. 74 percent of other unspecified quality quartz came was from Zimbabwe, 23 percent from India and insignificant amounts from United Kingdom, Madagascar and the United States.

**Dimension stone**

South Africa produced 869,6 kt of dimension stone in 2001, valued at R 724,8 million, a 6,3 percent increase in value compared with to 2000. Imports of granite decreased by 47 percent in 2001 from 5,1 kt in 2000 to 2,69 kt in 2001. A greater variety of locally produced, decorative granite, and increased beneficiation facilities have stimulated demand for local products, resulting in a decrease in imports. 65 percent of imported granite was from Zimbabwe, 16 percent from Italy and 14 percent from Brazil. Insignificant amounts came from India and the United Kingdom.

High imports from Zimbabwe are attributed to the weak Zimbabwean dollar, which results in cheap imports. Unique Zimbabwean black granite accounts for most of the Zimbabwean stone imports to South Africa. Some of the imports from Zimbabwe are for the South African market, other is in transit for export via a South African port. Competition from cheaper material from China and Brazil is a major threat to the local industry.

Imports of slate decreased by two percent from 4,708 tonnes in 2000 to 4,599 tonnes in 2001. 72 percent of our imports came from India, 16 percent from China and insignificant amounts from Brazil, Italy and Spain.
SIGNIFICANT PRIMARY INDUSTRIAL MINERAL IMPORT DECREASES, 2000 – 2001

<table>
<thead>
<tr>
<th>MINERAL</th>
<th>DECREASE %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphate rock</td>
<td>48</td>
</tr>
<tr>
<td>Granite</td>
<td>47</td>
</tr>
<tr>
<td>Gypsum</td>
<td>32</td>
</tr>
</tbody>
</table>


PRICES

In 2001 the tightening of monetary policy to curb inflationary pressures, and rising oil prices weighed heavily on local economic activity. Oil is an input price for cost of production. Output from the industrial mineral sector languished somewhat, but nominal value added in this sector benefited substantially from the depreciation in the exchange value of the rand. The depreciation of the rand propelled production and consumer price inflation to considerably higher levels in 2001. Price increases remained well above the inflation target set by government. This was due to the fact that cost-push factors led to inflation (exogenous factors).

Price increases continued to be dominated by after effects of the depreciation in the exchange rate. Increases in production prices, usually foreshadow rising consumer prices. Average prices of industrial mineral products increased faster than before. The average export price for dimension stone and vermiculite increased by 20 percent in 2001, while the average price for fluorspar increased by 25 percent. The import price of phosphate rock increased by 35 percent in 2001. Growth in prices of imported industrial minerals fuelled the acceleration in the price increases of domestically produced industrial minerals.

Prices for particular minerals depend on local availability and cost of production. A substantial proportion of the price of industrial minerals is the cost of transportation to the consumer. Prices for construction materials in metropolitan areas tend to increase as nearby extraction sites are closed or exhausted, leading to higher transport costs and price increases in developing urban and suburban areas. Sectors of the industrial mineral industry, such as dimension stone and vermiculite, are becoming increasingly under threat from cheap exports particularly from the East.

TRADE POLICIES

In recent years, the list of restricted goods requiring import permits has been substantially reduced, reflecting the Department of Trade and Industry’s (DTI) preference for supply-side measures as a means of stimulating local industry. Among the few products still requiring import permits are hazardous chemicals. Import permits must be obtained from the Director of Imports and Exports before the date of shipment. Failure to obtain a required permit results in the imposition of penalties.

South African policy in line with the World Trade Organisation does not favour direct subsidies. Instead indirect support for exporters is provided via the Export Marketing Assistance (EMA) scheme, which offers financial assistance for the development of new export markets through the financing of trade missions and market research. The new export finance guarantee scheme for small exporters is the government’s newest means of promoting small and medium exporters, through credit guarantees with participating financial organizations.

Southern African Customs Union

South Africa has a trade agreement with Botswana, Lesotho, Namibia and Swaziland through The South African customs union (SACU), to maintain free interchange of goods between these countries. SACU, which is the oldest customs union in the world, has recently been revamped and the agreement provides a new method of the sharing of all import duties. There are currently no SACU import statistics available from customs and excise.
Southern African Development community

The Southern African Development community (SADC) has formed a free-trade agreement (FTA), which has been operational since September 2001.

European Union Free trade agreement

In 2001, South Africa concluded the trade development and co-operation agreement, which will lead to the discontinuance of tariffs on more than 90 percent of trade between South Africa and the EU within the next decade. Inflation differentials between South Africa and its main international trading partners and competitors lead to a systematic and contained depreciation of the rand, which affect prices of imported goods. The reduction in import duties and South Africa’s trade agreement with the European Union will probably restrain the growth in prices of imported goods and, through increased competition, the increase in domestic prices.

WORLD TRADE ORGANISATION’S IMPACT ON MINERALS

The World trade Organisation (WTO) was established in January 1995 as a result of the General Agreement on Tariffs and Trade (GATT), Uruguay Round of Multilateral Trade Negotiations that were concluded at Marrskesh during April 1994. The WTO is the only international organisation dealing with trade rules between countries, and provides fair and uniform rules for international trade. The WTO makes world trade more competitive, predictable and transparent. The WTO rules provide protection to local producers against dumping of products, in the form of anti-dumping duties. Subsidies and dumping are seen as unfair trade practices by the WTO.

South Africa is a member of WTO and follows a harmonised system of import classification. As a contracting party to the GATT, as well as a founding member of the WTO, due to liberalisation of the South African economy in 1994, many changes have been made to the country’s trade and industrial policies, with the South African government committing itself to reducing and restructuring import tariffs and surcharges. South African has actively pursued a programme of trade liberalization reforms, particularly in phasing out export subsidies.

The WTO recognises the positive role that subsidies can play in the economies of developing countries. The most important rule under the GATT is that local industry should be protected by import tariffs only. Since South Africa is a major exporter of mineral products we are seen as competitive in the global trading environment. Demand for prices of primary industrial minerals are highly dependant on quality, and quantity of industrial minerals is generally dependent on numerous chemical and physical variables. The majority of industrial minerals are at least partly processed, and prices of apparently similar material may differ considerably in direct proportion to their purity, availability and suitability for particular processes. In general tariffs for these materials are low, and South Africa does not face high export tariff barriers on such products. Moreover demand for these unbenefticiated products are more linked to world prices than other factors, such as manufacturing quality, cost and other factors that influence prices of other goods. Therefore it can be assumed that tariffs play only a small role in demand for South African minerals. Industrial minerals enjoy very low tariff protection and imports decreased in 2001.

South Africa has a positive trade balance in industrial minerals. As South African minerals enjoy low tariff barriers in the markets of our trading partners, the WTO had little influence on South Africa’s industrial minerals.

Import weighted average tariff for: Salt, Sulphur, stone, plastering materials, lime and cement:

<table>
<thead>
<tr>
<th>Year</th>
<th>Import weighted average tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>3%</td>
</tr>
<tr>
<td>1996</td>
<td>3%</td>
</tr>
<tr>
<td>1997</td>
<td>2%</td>
</tr>
<tr>
<td>1998</td>
<td>2%</td>
</tr>
<tr>
<td>1999</td>
<td>1%</td>
</tr>
<tr>
<td>2000</td>
<td>1%</td>
</tr>
<tr>
<td>2001</td>
<td>1%</td>
</tr>
<tr>
<td>2002</td>
<td>1%</td>
</tr>
</tbody>
</table>
GATT/ WTO tariff binding 2%

<table>
<thead>
<tr>
<th>Year</th>
<th>Import weighted average tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>10%</td>
</tr>
<tr>
<td>1996</td>
<td>9%</td>
</tr>
<tr>
<td>1997</td>
<td>9%</td>
</tr>
<tr>
<td>1998</td>
<td>8%</td>
</tr>
<tr>
<td>1999</td>
<td>7%</td>
</tr>
<tr>
<td>2000</td>
<td>7%</td>
</tr>
<tr>
<td>2001</td>
<td>7%</td>
</tr>
<tr>
<td>2002</td>
<td>7%</td>
</tr>
<tr>
<td>GATT/ WTO tariff binding</td>
<td>16%</td>
</tr>
</tbody>
</table>

The above tables show that import tariffs on the industrial mineral products were reduced as part of South Africa’s obligation to WTO impact of tariffs. South African tariffs are lower than WTO binding tariffs.

OTHER WTO IMPLICATIONS

As the general benefits to and obligations of South Africa under WTO are also applicable to the mineral sector of industry, South Africa has the right to protect the sector from unfair trade practices, such as the levying of countervailing duties on mineral product imports that are subsidized in the countries of origin. However such subsidies must effect our trade interests before any action can be taken. The industrial Development Corporation has a program aimed at assisting small medium sized mining and mineral beneficiation projects, which the WTO has approved.

Customs valuation, in accordance with the WTO Customs Valuation Agreement, is based on the f.o.b. price in the country of export or the transaction value, i.e., the price actually paid or payable. Where the transaction value cannot be ascertained, the price actually paid for similar goods, or a computed value may be used, based on production costs of the imported goods. More technically complex situations arise in cases where goods are imported into South Africa for shipment to members of the SACU, and more susceptible to duty evasion.

MATTERS REQUIRING ATTENTION

Delays in the transport of bulk goods have affected many industries including minerals and require urgent attention. It appears that trips from inland to ports are taking far longer than they did as little as two years ago, which indicates inefficient use of rolling stock, rather than a shortage thereof.

The problem of illegal operators in the sand extraction sector is well known, and of great concern to the Department. A method of encouraging illegal operators to register their operations with the Department needs to be found, but may require dedicated staff, whom are currently not available at regional offices.

FUTURE OF THE SOUTH AFRICAN INDUSTRIAL MINERAL INDUSTRY

The demand for industrial minerals used in the automobile manufacturing industry (such as titanium oxide used in paints), and for those used by the building and construction sectors has a major impact on the
local sales of industrial minerals. Together these two sectors of the South African economy are significant consumers of glass, cement, crushed stone sand and gravel.

The combined outlook for the building industry remains modest, but in construction works the outlook is more positive. Investment in construction works declined throughout the nineties, principally because of government’s policy to curtail expenditure. Government has recently stated its intention to step up its overall capital expenditure program. Aggregate capital expenditure is projected to increase. This rise in capital expenditure should have a notable positive impact on the construction sector over next five years.

The real value added by the construction sector increased. Roads construction and improvement of economic and social infrastructure provided the basis for increased activity in the civil engineering subsector. Residential construction and alterations to existing buildings also made contributions to the faster pace of construction activity, but on a far less impressive scale than civil engineering.

There has been a considerable improvement in the building and construction industry and the residential industry. This will benefit the industrial mineral sector. Increased mining investment and increased spending on infrastructure by government will also have a favourable impact on the downstream industrial minerals and glass sectors. The decline in the value of the rand provides protection for producers for the domestic market.

Export sales of industrial minerals appear to be dominated by dimension stone, with andalusite and vermiculite coming distant second and third places. Local sales of phosphate rock are not published but are an important source of export revenue after being converted locally to phosphoric acid. Chromite destined for use in the chrome chemical industry will in future be reported as a contributor to the industrial mineral sector, as well illmenite for the pigment industry and antimony trioxide.

**BENEFICIATION**

Most industrial minerals used in the construction industry are beneficiated locally to the stage at which they enter a manufacturing process. Fluorspar, alumino-silicates (andalusite) and vermiculite are exported in varying concentrate grades, each grade generally with specific markets. Fluorspar is exported in acid, metallurgical and ceramic grades. Four types of andalusite is exported, i.e. Purisite, Randusite, Durandal, Krugerite. The four types are used in refractory bricks and ceramics. Vermiculite in its natural state is exported in different grades. 90 percent of dimension stone sales are exported in the form of rough blocks. Local processing of rough blocks to slabs and finished articles is increasing, but there are opportunities for further local beneficiation of the rough blocks. The fact that local dimension stone companies are under foreign control complicates this issue, as the local companies were established in order to supply rough blocks to established overseas processing plants, owned by the parent companies.
Alpha Ltd.
Buffalo fluorspar
Bayer (chem grade chromite)
Chamotte Holdings (Pty) Ltd (magnesite)
Consol Ltd.
Corobrik (Pty) Ltd.
Foskor Ltd.
G&W Base and Industrial Minerals (Pty) Ltd.
Idwala Holdings (Pty) Ltd.
Imerys (alumino-silicates)
Indian Ocean Fertilizer (Pty) Ltd.
International Metal Processing (Pty) Ltd.
Iscor Ltd.
Kelgran Ltd.
Lafarge (South Africa)
Marlin Corp Ltd.
Metorex Ltd.
Micronised Products (Pty) Ltd.
Palabora Mining Company Ltd.
PPC Ltd.
RED Graniti
Richards Bay Minerals (TiO₂ for pigments)
Sallies Ltd.
Samquarz (Pty) Ltd.
Samrec (Pty) Ltd.
Serina Kaolin (Pty) Ltd.
Verref (Pty) Ltd.
Wonderstone Ltd.