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## BUSINESS INFORMATION

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## ***THE PRESIDENT'S REPORT***

### ***Overview***

Apart from a resurgence in the diamond industry, 1999 was generally a lacklustre year on international metal markets. Prices of most metal commodities traded in a narrow range, both starting and ending the year at similar prices. Most analysts concur that the effects of the Asian economic crisis have been underestimated with demand lagging significantly behind supply, thus accentuating imbalances already noted in previous years.

In the above context of continued poor international market conditions, the Namibian mining industry performed satisfactorily. It is pleasing to note that the high level of exploration activity in the country over the last few years has not diminished but an increase in expenditure of some 41 % over the 1998 level has been reported. One may, therefore, have cause for cautious optimism for future developments in the industry.

Unfortunately there has been no resolution of the Tsumeb Corporation issue, which is extremely disappointing, not only to the mining industry but also to those who were hoping to regain employment and to persons in the peripheral support service industries. Negotiations on the disposal of the Corporation's assets have been very complex and it is hoped that some finality can be found in the very near future.

As noted in the report last year, competition for international funding is extremely intense with the result that mining projects, which are classified as high risk, are finding it difficult to attract investment. Investor confidence depends on a number of factors, not least of which is national stability. Namibia has, since Independence, been regarded as a very stable country with an environment that is conducive towards investors. However, increasing unrest in neighbouring states is undoubtedly having an adverse effect on the region which directly impinges on Namibian investment.

### ***Prospecting***

As has been noted, exploration expenditure by Chamber members in the year under review increased significantly from the N\$ 124 million expended in 1998 to approximately N \$ 175 million during 1999.

As in previous years expenditure by the diamond industry accounted for the major portion, amounting to some N\$ 113 million. Namdeb reported expenditures of nearly N\$ 70 million on sampling and general exploration work, whilst Diamond Fields Namibia spent some N\$ 27 million on work associated with its evaluation of the Marshall Forks Project.

Base metals exploration was again led by the continuation of work at Anglo American Base Metals' Skorpion zinc deposit where an estimated expenditure of N\$ 30 million was incurred on additional drilling and bulk sample testing. Several other international companies have expended significant amounts on the furtherance of their programmes in various areas of the country with, apparently, some success.

The announcement by the Ministry of Mines and Energy, that a large portion of the Sperrgebiet (Forbidden Territory) was to be opened up for general prospecting, has met with considerable interest. The area, which has been effectively closed to exploration since the early 1900's, has significant development potential and a number of companies have visited the region with a view to acquiring exploration licences.

Although the office of the Mining Commissioner is to be congratulated on its performance during 1999, the delay in the formal appointment of a new Mining Commissioner is of concern. This is not only a senior position within the Ministry but also a legal appointment in terms of the Minerals Act.

### ***New Developments***

The acquisition of 92 % of the shareholding of Ocean Diamond Mining (ODM) by Namibian Minerals Corporation (Namco) towards the end of 1999 created a major force in the marine diamond mining industry. The consolidated company, benefitting from combined technology, will enjoy some 27000 sq.km. of concession areas and four mining vessels and is likely to increase its overall production significantly in the year 2000.

As noted above, considerable additional drilling work and bulk ore sample testing has been carried out at the Skorpion zinc deposit. It is hoped that final approval for project implementation will be forthcoming towards the middle of this year.

Acclaim Uranium have carried out a preliminary, but comprehensive, assessment of the Langer Heinrich uranium deposit with extremely encouraging results. The company is now preparing to conduct a final feasibility study based on a re-interpretation of the geology and new innovative technology.

Namdeb, as has been reported previously, is preparing for the closure of the Auchas Mine and has, over some time, been evaluating the Daberas deposit. The new Daberas mine is planned to be in production by the end of the year 2000 and is projected to have an operating life of ten years.

### ***Capital Investment***

In order to maintain a competitive edge in international markets the mining industry has to continuously re-examine the efficiencies of its operations, keeping abreast of technological developments. The necessity for such review exercises is accentuated in times of poor international market conditions. The Namibian mining industry is well aware of competition and, accordingly, invests significant funds to ensure a viable future.

Rossing Uranium's capital investment programmes, including the replacement of the haultruck fleet, continued during the year under review. A business improvement programme, Rossing Beyond 2000, was launched during the year and is proving a very successful means to reduce costs and improve efficiencies and productivity. Capital investment in the operation during 1999 totalled some N\$ 72 million, bringing the total investment in Rossing over the last four years to N\$ 220 million.

Namdeb has also made a substantial investment in the Replacement Business System Project (SAP R3), which will place Namdeb on a par with global best practices in delivering efficient and reliable business information. Capital expenditures of approximately N\$ 129 million have been incurred during 1999, on major earthmoving equipment replacements, improvements to treatment facilities, Y2K compliancy, and personnel control centre upgrades.

During 1999 Namco committed itself to the construction of a second mining system, NamSSol II, whilst also announcing a joint venture with Wirth of Germany, a pioneer in seabed diamond drilling technology, to develop a 47 ton exploration sampling tool at a cost of US \$ 1,5 million.

Rosh Pinah Zinc Corporation has also embarked on a substantial efficiency improvement / cost reduction programme, known as the Re-Engineering Programme. The exercise is scheduled for completion by the end of 2000. Capital expenditures at Rosh Pinah in 1999, which are closely linked to the requirements of this programme, amounted to some N\$ 17,2 million.

Okorusu Fluorspar's capital development programme is scheduled for completion towards the end of 2001, at a total project cost of some N\$ 24 million. In 1999 the company expended approximately N\$ 1 million

on the geological reassessment of the “B” orebody and further exploration assessment work is planned for the new year.

### ***Health & Safety***

With an increased level of employee participation and more intensive reviews of safety incidents, Chamber member operations maintained the high standards they have achieved in previous years.

Elizabeth Bay Mine has retained its NOSCART status, whilst Auchas Mine has also achieved this coveted award. Within the Iscor organisation, Rosh Pinah was recognised as having achieved the best sustained safety performance over a period of three years, and was awarded the Tom Muller trophy.

Despite the high priority given to safety during the year, an accident at Namdeb resulted in one fatality. In November a vehicle accident between Karibib and Okahandja claimed the life of a Rossing employee. Rossing has decided to stand down from its NOSCART status, even though in Namibia a road accident is not classified as a work (e.g. mining) related incident.

It is, however, encouraging to note that the overall safety record of Chamber members has continued to improve from year to year. The number of lost-time accidents have shown a steady decrease over the past five years and both the frequency and severity rates mirror this encouraging trend. In addition to the comprehensive investigations carried out on lost-time accidents, members actively reviewed over 230 no lost-time safety incidents during the year.

Navachab and Elizabeth Bay Mine are to be congratulated on their performances in the Chamber Inter-Mine Safety competition where they emerged as the winners of the 1999 A and B Divisions respectively. These two operations are awarded trophies but all employees are to be congratulated for their active and constructive participation in the various health and safety programmes.

The series of tripartite meetings, initiated by the Chamber in 1998, to draft new Health & Safety Regulations have been successfully completed and it is planned to present the new Regulations to the Minister of Mines by the end of February.

Matters pertaining to occupational health are gaining more importance and the Chamber Safety Committee has resolved to accord this topic greater prominence in the future. The mining industry is obviously concerned as to the causes and incidence of occupational diseases and will make a concerted effort to tabulate incidents and develop strategies and effective monitoring programmes.

The mining industry's commitment to health and awareness programmes through the Chamber was extended in July 1999 when Okorusu Fluorspar formally committed itself to sponsoring the Occupational Health Education and Awareness Programme (OHEAP). A Coordinator has been appointed to the programme who will concentrate on reinforcing the work already done and expanding its activities to other non-mining companies. The Coordinator has received valuable assistance from members of the various Peer Educator groups who spend considerable private time in counselling and promotional information activities.

### ***Employee Relations***

The development of open employee / management relationships continued to receive a high priority during 1999.

A number of agreements have been entered into during the year, including job evaluation, appointment and remuneration of full-time shop stewards and safety representatives, Union officials' leave periods, and transport arrangements.

Under the supervision of a special company / union committee. the migrant labour system, previously operating at Namdeb, was abolished during June 1999. The Corporation has also carried out an in-depth audit of its internal communications systems in an effort to improve communications within the company.

Although only one informal meeting was held between the Chamber and Mineworkers' Union executives, the meeting was conducted in an extremely open, frank manner, resolving to proceed towards the signing of a joint statement of intent. It is hoped that these high profile meetings will become more frequent in the new millennium.

Unfortunately, as generally noted in the section on Mineral Markets, the mining industry worldwide has continued to face adverse market conditions with the result that a number of companies are re-assessing their businesses. Besides revaluation, and possibly redesign, of systems and procedures, companies are tending to concentrate on their core business and "out-source" non-core activities. Inevitably such exercises are accompanied by workforce reductions, generally accomplished through the provision of early retirement or voluntary departure packages. Fortunately, however, a number of employment opportunities have resulted from these "out-sourced" activities. The Chamber employment statistics are shown in Annexure F.

### ***Government relations***

The mining industry, through Chamber representatives, has played a major role in constructively assisting in the drafting of new legislation and reviewing amendments to existing legislation.

Representatives of the Chamber actively participate on a number of decision-making bodies including Labour Advisory Council, Social Security Commission and the recently formed Employment Equity Commission.

The mining industry, as a major player in Namibia's economy, is committed to, wherever possible, the principles of sustainable development and therefore has an almost proprietary interest in the development of sensible legislation which will provide an enabling environment for the future security and prosperity of the Namibian population. It follows, therefore, that the development of sound relationships between the three social partners in the country is of paramount importance to achieve such objectives and the Mining industry is committed to fulfilling its role as a responsible partner in this enterprise.

### ***Outlook***

Unfortunately the expected resurgence of the Asian "tiger" has not been as rapid as many analysts predicted. Consequently international markets have not recovered along the lines previously forecast. The hiatus in demand has correspondingly been accentuated by increased supply resulting from the expectations of an early recovery in the Eastern markets. Predictions for most metal commodities are that prices will slowly move upwards, provided acceptable balances in supply and demand can be maintained. It is, however, expected that the millennium phenomenon will act as a buffer for both the diamond and gold markets throughout 2000, consolidating recent gains made by these commodities.

Despite being cautiously optimistic regarding future prices, the mining industry will, as usual, have to contend with increases in costs and will have to continuously review its resources and efficiencies to remain competitive in international markets.

CHAMBER MINING MEMBER EMPLOYMENT AND PRODUCTION STATISTICS

<b>Company</b>	<b>Employees as At 31.12.99</b>	<b>Product</b>	<b>1999</b>	<b>1998</b>
Namdeb Diamond Corporation (Pty) Ltd	3269	Diamonds (carats)	1289776	1275228
Rossing Uranium Ltd	1006	Uranium oxide (metric tons)	3171	3278
Tsumeb Corporation (In provisional liquidation) Limited				
Tsumeb Smelter		Blister copper		8014
		Refined lead		236
		Silver		16,68
		Refined cadmium		0
		Refined arsenic trioxide		175
		Gold (kilograms)		27
		Sodium antimonate		0
Tsumeb Mines		Copper concentrate		7614
		Lead concentrate (metal figures under Smelter)		0
Kombat Mine		Copper concentrate		8160
		Lead concentrate (metal figures under Smelter)		38
Otjihase Mine		Copper concentrate		7045
		Pyrite concentrate (metal figures under Smelter)		28174
Erongo Mining and Exploration Company Ltd (Navachab Mine)	361	Gold (kilograms)	2008	1855
Rosh Pinah Zinc Corporation (Pty) Ltd	424	Zinc concentrate	69193	78617
		Contained zinc	34639	42274
		Lead concentrate	19283	24273
		Contained lead	9361	13332
		Contained silver	9,67	5,97
Okorusu Fluorspar (Pty) Ltd	139	Fluorspar (97 %) concentrate	57700	42139
Ocean Diamond Mining Holdings Ltd	140	Diamonds (carats)	73327	59718
Namibian Minerals Corporation	75	Diamonds (carats)	256445	98857

Diamond Fields (Namibia) (Pty) Ltd	contract	Diamonds (carats)	6692	5802
Diaz Point Exploration (Pty) Ltd	85	Diamonds (carats)	12461	n/a
Salt & Chemicals (Pty) Ltd	87	Coarse salt	429230	434198
Salt Company (Pty) Ltd	67	Coarse salt	60100	61915
		Refined salt	7220	5223
		Rock salt	6220	6025

(production figures in tonnes unless otherwise stated)

## 1999 ANNUAL REPORT

### 1. LOCAL PRODUCTION

#### *1.1 Diamonds*

During 1999 Namibian diamond production amounted to approximately 1,639 million carats, an increase of some 13,8 % as compared to the 1,44 million carats produced in 1998. Marine diamond production accounted for 55,5 % of total output (1998 - 51 %), at just over 910000 carats, from the offshore operations of Namdeb (Debmaringe), Namibian Minerals Corporation (Namco), Ocean Diamond Mining (ODM), and Diamond Fields Namibia (DFN).

From a production point of view, 1999 was a satisfactory year for Namdeb, with some 716100 carats being produced from land-based operations. A slight shortfall in tonnage treated was experienced resulting from problems of screening efficiency with the dredge floating treatment plant trommels. To address this problem an elutriator, the first of its kind used in this application, has been installed. The unit, 13m high by 2,3m diameter, is designed to remove at least 30 % of the sand fraction (-2mm) before it reaches the trommels, thereby increasing throughput. Initial indications are promising.

At Mining Area No 1 observations, regarding the ore to be treated by the No 4 Plant until its end-of-life, have shown that crushing requirements are minimal. Accordingly the plant has been significantly modified with the entire front-end, including crushing, being closed down. These modifications should significantly reduce plant working costs.

Along the Orange River, the mobile treatment plant (introduced in 1998), which was treating samples at the Sendelingsdrift deposit, has been transferred to Daberas in series with an infield screening plant. This plant will augment production during the closing phase of the Auchas Mine and the construction and commissioning phases of the new Daberas Mine. The new mine is planned to be in production by the end of the year 2000 and is projected to have an operating life of ten years.

At the Elizabeth Bay Mine testwork concluded that locked-up diamonds in the gritstone can be liberated by crushing. Accordingly capital has been approved for the installation of a crushing plant, which will be commissioned during 2000 and extend the life-of-mine by approximately four years.

Namdeb reports capital expenditures of approximately N\$ 199 million in 1999, of which sampling and prospecting accounted for some N\$ 69,9 million with the remainder being spent on major earthmoving equipment replacements, improvements to treatment facilities, Y2K compliancy, and personnel control centre upgrades. Of particular interest is the Replacement Business System Project (SAP R3) which project is scheduled for completion during March 2000. The system will place Namdeb on a par with global best practices in delivering efficient and reliable business information.

1999 was the first full year of production for NamGem Diamond Manufacturing Company, with some 11000 stones polished from a steady supply of sawn stones. The make and yield of the finished diamonds is commercially competitive on world markets and has also attracted local jewellers. By the end of 1999 the factory was producing approximately 100 finished stones per day at an average size of 14 points.

Namgem currently has 51 employees (90 % of which are from the immediate vicinity of Okahandja), of which 35 have been trained from inception to a high level of craftsmanship.

Namco, in its second full year of production, more than doubled its production from 98857 carats in 1998 to 256445 carats in 1999. These results are a reflection of the success of Namco's mining technology with the NamSSol seabed crawler unit. During the year under review some modifications were made to upgrade the launch and recovery system and enhance the undercarriage and boom.

During 1999 Namco committed itself to the construction of a second mining system, NamSSol II, which is designed to be some 25 % more powerful than the NamSSol unit and which is scheduled to start operations midway through the year 2000. The unit will be positioned on a chartered vessel, to be named MV ya Toivo, in honour of Namibia's first Minister of Mines.

During the third quarter of 1999 Namco officially announced its joint venture with Wirth of Germany, a pioneer in seabed diamond drilling technology, to develop a 47 ton exploration sampling tool at a cost of US \$ 1,5 million. The unit will be used for ongoing exploration at the Hottentots Bay and Luderitz Bay Grants. Namco also reported that the assessment of exploration results in the Hottentots Bay Grant indicates a total resource of 2,9 million carats.

1999 was also a year of consolidation for Namco as it acquired some 92 % of the shares of ODM during the last quarter of the year. ODM assets acquired include some 20000 sq.km. of marine diamond concessions and three mining vessels. It is, therefore, not unreasonable to forecast the new Group's production for the year 2000 at close to 350000 carats.

ODM itself produced some 73327 carats from its operations in the year under review.

In recognition of Namco's excellent environmental policies and programmes the company was awarded ISO 14001 accreditation towards the end of 1999. Namco thus becomes the first Namibian mining company to achieve this international standard.

Diamond Fields' Advanced Sampling and Trial Mining Programme for its Marshall Fork Prospect progressed satisfactorily during the year under review. Some N\$ 27 million has been expended on phases 2 and three of the exploration programme, whilst some 6632 carats were produced. A further 60 carats were obtained from inshore prospecting and contract mining activities. Towards the end of the year the company commissioned a Scoping Study to investigate the prospect's economic viability vis-à-vis the possibility of initiating mining operations in late 2000 / early 2001.

Operations at Diaz Point Exploration produced a total of 12461 carats for the year under review. A new 100 tph field screening unit was deployed which has the capacity to increase throughput by a factor of three.

## ***1.2 Uranium***

Rossing Uranium, Namibia's only operator, produced 3171 metric tonnes of uranium oxide during 1999, a reduction of some 107 tonnes (3 %) on that produced in 1998. It is expected that production will increase by approximately 10 % during 2000, in line with delivery requirements to existing customers. Rossing continues to operate below design capacity given the continuing low levels of demand in the uranium market.

In response to the difficult prevailing market conditions, a business improvement programme, Rossing Beyond 2000, was launched in April 1999, designed to reduce costs by at least 20 % from 1998 levels. The programme is making good progress and is scheduled for completion by the end of 2000 with full benefits being realised by the middle of 2001.

At the end of the year the employee complement was 1006 as compared to 1182 at the end of 1998. During the year 147 employees exercised the option to accept the company's offer of Voluntary Early Retirement or Departure packages.

During 1999 the implementation of an Environmental Management System (EMS) progressed satisfactorily. An internal verification audit was conducted by Rio Tinto personnel, whilst arrangements for external auditing and international certification of the system have been initiated with the target of ISO 14001 certification in the year 2000.

Capital investment programmes, including the replacement of the haultruck fleet, continued during the year. In total, some N\$ 72 million (US \$ 11,8 m) was invested in the site in 1999, bringing the total investment in Rossing over the last four years to N\$ 220 million (US \$ 36,1 m).

Acid production was adversely affected by an explosion which occurred at half year causing damage to the roaster and gas coolers. As a result, acid supply options were reviewed, which indicated that importing, at least in the short term, is more cost effective than in-house production. It is, therefore, likely that the plant will close during the second quarter of 2000 and be mothballed for at least two years. However, the

implementation of such an option will necessitate the upgrading of offloading and storage facilities at both the port and on site as well as an increase in rail transportation. An EIA will be conducted to assess any potential impacts of this project.

### ***1.3 Copper***

The production of blister copper ceased on the 29<sup>th</sup> April 1998 when Tsumeb Corporation was placed under provisional liquidation. The Corporation remained dormant during the year under review.

Negotiations for the purchase of the assets and operations of the Corporation, as a “going concern”, have taken place throughout 1999 with a number of prospective buyers.

The whole matter is extremely complex but it is hoped that the issue will be resolved towards the end of February 2000.

### ***1.4 Lead***

There was no refined lead production at the Tsumeb Corporation plant during 1999

A reduction in overall grade mined resulted in Rosh Pinah’s production of lead concentrates declining from 24273 tonnes in 1998 to 19283 tonnes in 1999, a decrease of 20,6 %. Unfortunately, the lower grades had a “ripple” effect in terms of concentrate grade which also dropped to just below 50 %. However, the silver content in concentrates increased from 5,97 mt in 1998 to 9,67 mt in the year under review. Since the demise of the TCL plant, Rosh Pinah has followed a successful sales system of trader tenders for overseas shipments through the Port of Walvis Bay. It is hoped that recent improvements to the Luderitz harbour will accommodate the shipment of future consignments thus reducing transportation costs.

### ***1.5 Zinc***

The planned mining of lower grade areas effectively reduced Rosh Pinah’s zinc production during 1999. Some 34639 tonnes of metal in concentrates was produced in the year under review as compared to 42274 tonnes in 1998. There was a corresponding slight decrease in overall concentrate grade from 53,8 % in 1998 to 50,0 % in 1999.

During February 1999 the name of the owner of the assets of the mine, a wholly owned subsidiary of Iscor Ltd, was changed to Rosh Pinah Zinc Corporation (Pty) Ltd.

Considerable time, expertise and money has been successfully invested in the major Re-Engineering Programme during the year under review. The programme, which is scheduled for completion by the end of the year 2000, has two interlinked objectives namely, to reduce costs by increasing efficiencies through a thorough audit of all systems. Capital expenditures in 1999, which are closely linked to the requirements of this programme, amounted to some N\$ 17,2 million.

In November 1999, a joint exploration agreement was signed between PE Minerals and Iscor to explore base metals concessions held by the two companies. This effectively means that Rosh Pinah Zinc Corporation will confine itself to production exploration.

### ***1.6 Gold***

There was no gold production from Tsumeb Corporation’s facilities.

In 1999 gold production from the Navachab Mine increased by 8,25 % from 1855 kg in 1998 to 2008 kilograms.

Production during the first part of 1999 continued at 1998 levels, with normal operations at pit bottom being resumed during the second half of the year. Consequently grades improved slightly as reflected in the production of some 2008 kilograms of gold for the year, an increase of 8,2 % on the 1855 kg produced in 1998.

The phased pit expansion project (involving extensive geological work, mine planning and costing exercises) to extend the life-of-mine from 2003 to 2012, was approved by AngloGold (the sole shareholder) early in 1999. However, several factors, including problems with the workforce (which resulted in a six day strike), the gold price crisis during the year, failure to obtain continuous operational status, and the issue of work permits, have resulted in the expansion programme being reviewed. Currently only phase 1 of the overall expansion project is being undertaken, which will extend the life-of-mine by two years with closure projected for 2005.

A further investigation into the viability of a much larger pit operation, relying on economies of scale together with cost / risk management, is currently being conducted.

### ***1.7 Silver***

No silver was produced by the Tsumeb smelter during the year.

Silver in lead concentrates, produced by Rosh Pinah Zinc Corporation, increased by approximately 62 %, from 5,97 mt in 1998 to 9,67 metric tonnes in 1999.

### ***1.8 Fluorspar***

A number of major investment projects covering all aspects of the mine's operation were completed during 1999, the second year under the ownership of the international chemicals and pharmaceuticals group, Solvay.

Production of Acid Grade CaF<sub>2</sub> in the year under review once again showed a dramatic improvement, from 40684 tonnes in 1998 to 57700 metric tonnes in 1999, an increase of some 42 %.

The capital development programme will continue for a further two years with significant capital earmarked for geological exploration. Peak production of 97 % pure acid grade concentrates is expected to be achieved by 2001. Budgetted production for the year 2000 has been set at 70000 metric tonnes, some 21 % higher than that achieved in 1999.

The "A" pit rehabilitation project, initiated in 1998 with financial assistance by way of a loan from the Sysmin Fund, ran well throughout the year, producing some 1,85 million tonnes. A further loan of N\$ 6 million, towards the total project cost of N\$ 24 million, was secured from the Mineral Development Fund. The pushback project is expected to be completed by the end of April 2000, having exposed some ten years supply of ore at low stripping ratios.

Approximately N\$ 1million was expended on diamond drilling and geological assessment of the "B" orebody. The conclusions of the geological exploration project in "B" pit were positive, resulting in an effective doubling of the proven resource, coupled to the ability to confidently predict ore grades, the variability of ore grades, and the ability to produce a reliable mine plan.

Significant capital investments were applied to mining machinery and metallurgical plant and equipment, whilst wide-ranging improvements were made to housing and accommodation facilities as well as the administrative offices, workshops and analytical laboratory.

As part of its social responsibility programme and commitment to the future of Namibia and its people, Okorusu Fluorspar initiated sponsorship of the mining industry HIV / AIDS campaign, "CoM / Okorusu Oheap" (Occupational Health Education & Awareness Programme), managed by the Chamber of Mines.

As covered elsewhere in this Report, the programme has been successfully operated and has evinced support and participation by both mining and non-mining companies.

### ***1.9 Salt***

Production of coarse salt during 1999 by the two Chamber member companies, Salt Company and Salt & Chemicals, decreased by approximately 6800 tonnes, from 496113 tonnes in 1998 to 489330 tonnes in 1999.

Bulk sales by Salt & Chemicals to its parent company, Sentrachem Ltd, in the South African chemical industry were lower than the previous year, due to reduced production at the calcium cyanide plant, as well as plant optimisation at one of the chlor-alkali plants. However, the deficit was made up by additional sales to West and East African refining operations.

Salt Company maintained its production levels to those of previous years, at around the 73000 tonne level, counterbalancing a slight fall-off in coarse salt sales with an increase in sales of the refined product.

As reported last year, bagged salt sales continued to show a steady decline due to political instability plus difficulties with the availability of foreign exchange in neighbouring states. This particularly applies to the salt market in the Democratic Republic of the Congo which has traditionally been an important trading destination for Namibian salt producers.

## 2. MINERAL MARKETS

### 2.1 Diamonds

Overall sales of rough diamonds through the CSO in 1999 reached the record level of US \$ 5240 million, some 57 % higher than the previous year's sales of \$ 3345 million. Sales in the second half of 1999 were US \$ 2793 million, 70 % higher than for the same period in 1998.

Central Selling Organisation sales (in millions US \$) for the last four years are as follows :

Year	First Half	Second Half	Total	% Change
1996	2748	2086	4834	
1997	2880	1760	4640	( 4,01 )
1998	1700	1645	3345	( 27,91 )
1999	2447	2793	5240	56,65

As reported last year, in 1998 the CSO implemented its policy of restricting the supply of rough gem diamonds to the manufacturing centres to a level consistent with demand. This policy effectively addressed the continued problems of the Japanese and South East Asian markets in particular and global economic uncertainties affecting world financial markets. As a consequence of this action, stocks of rough and polished diamonds in the cutting centres were at a low level at the end of 1998.

All major retail markets have shown a positive trend during 1999, with continuing strength in the USA, increased polished diamond imports into Japan, some recovery in South East Asia, and steady growth in Europe. The low level of stocks in the cutting centres at the beginning of the year, together with improved sentiment throughout the diamond industry, has enabled the CSO to increase its sales above the level of increased retail demand.

In addition to the general market recovery, the CSO has been actively pursuing a number of initiatives to increase its sales, particularly of those areas of slow moving stock which had been adversely affected by the economic difficulties in Japan and South East Asia. Considerable efforts were concentrated on Millennium marketing activities, which began in the second half of the year and will continue throughout 2000. These promotional activities have been well received by all sectors of the trade and appear to be having a positive impact on sales. It is anticipated that the incremental Millennium sales will underpin the sales of rough diamonds in 2000.

### 2.2 Uranium

During the year the average restricted spot price, having commenced at US \$ 8,75 per lb U<sub>3</sub>O<sub>8</sub>, reached a high of US \$ 10,85 in March before beginning its slide to reach US \$ 9,60 per lb U<sub>3</sub>O<sub>8</sub> at the end of December. The average restricted price for 1999 was US \$ 10,20 as compared to US \$ 10,41 in 1998 (a decrease of approximately 1 %). Similarly, the average unrestricted price fell from US \$ 9,01 in 1998 to US \$ 8,25 per lb U<sub>3</sub>O<sub>8</sub> in 1999.

Spot market transactions during the year totalled some 22000 mt U<sub>3</sub>O<sub>8</sub>, still well short of the annual consumption of 75000 mt U<sub>3</sub>O<sub>8</sub>. Whilst spot demand increased significantly from that of 1998, returning to 1997 levels, the long-term contracts levels remained low. This factor, combined with aggressive bidding by a number of sellers, prevented the rise in price experienced in the first quarter of 1999 from continuing and led to the reversal in price trends for the balance of the year.

A major development in the industry in 1999 was the conclusion of an option-type agreement between the Russian government and a group of western companies (mining companies Cameco and Cogema and trader Nukem) for the purchase of down-blended Russian military Highly Enriched Uranium (HEU). The western consortium has the right, but is not obliged, to take delivery of the uranium feed at a fixed option price, with any material not purchased going into Russia's stockpile. However, at prevailing prices there is currently no financial incentive for the consortium to exercise its option to purchase the uranium feed.

As reported last year, a number of announcements were made in the last quarter of 1998 regarding projects and operations where production was cancelled, deferred or cut back. Several, more modest, production cuts were announced during 1999.

Negative international publicity arose from a nuclear accident at Tokaimura in Japan in September 1999. A nuclear reaction occurred whilst employees at the facility were processing fuel rods, which involved the mixing of uranium and nitric acid. Although this process is not used in the commercial nuclear cycle, the incident is expected to have some negative impact on the new reactor construction programme in Japan.

### ***2.3 Copper***

As reported last year, the levels of exchange stocks have risen dramatically, passing the 500000 tonne mark in November 1998 to start 1999 at just over 610000 tonnes. This stock level is comparable to that in 1994 when prices were in the region of US \$ 1800 per tonne. Unfortunately, the same price levels did not apply in 1999, with the metal being traded at US \$ 1440 per tonne at the start of the year. Prices declined slightly during the first quarter of the year to a low of US \$ 1354, but climbed steadily thereafter, averaging around the US \$ 1735 per tonne in the last quarter of 1999, whilst the average price in January 2000 rose to US \$ 1842,54 per tonne. The overall average for copper in 1999 was, however, US \$ 1571,45 per tonne, a decrease of some 5 % on the 1998 average of US \$ 1653.

World growth patterns for the next five years will be, to a great extent, dependant on the economic recovery in Asian countries. It is estimated that demand in that region will only rise by an average of 4 % per annum during that period. It is also forecast that demand for copper in the mature, developed western economies, which currently account for two thirds of world offtake, will flatten off over the same period. The prospects of a major recovery in copper prices over the medium term are, therefore, not promising.

However, despite losses in use due to the advancement of fibre-optic technologies, new application markets are being developed for the metal including, superconductivity applications, sheathing of ships' hulls and offshore platforms, the development of electric vehicles, earth-coupled heat pumps, solar energy technology, and nuclear waste disposal canisters. One of the main reasons for this development of alternative applications is that the extraction processes to recover the metal are less energy intensive than processes for a number of other, potentially competitive, metals.

### ***2.4 Lead***

Opening the 1999 year at US \$ 495 per tonne, as against the December close of \$ 501, lead maintained its price at an average of US \$ 503 per tonne throughout the year, with very little intermediate price variations, and closed the year at US \$ 478 per tonne. The average price thus realised in 1999 was some 5 % lower than the 1998 average price of US \$ 528 per tonne.

Rosh Pinah reports that lead was exported at a price of US \$ 540 at the beginning of the year, falling to US \$ 513 during July, with a further decrease to US \$ 495 during September 1999. Treatment charges on lead exports were US \$ 210 / dmt, as agreed contractually with traders, as compared to US \$ 217 in September 1998.

Lead faces a long-term risk of a falling share in the vehicle battery market as research appears to favour substitutes for the traditional lead-acid battery. However, short-term demand for lead in the stationary and traction battery is sky-rocketing. There would also seem to be potential for technical changes in motor vehicle batteries, increasing the intensity of lead use, as vehicle substitute electrical operation for many present mechanical functions. It is expected that such design changes will start to affect lead demand in about five years time.

The downside for the lead market, and thus prices, is the projected development of the Century project in Australia, which is eventually scheduled to produce some 40000 tonnes, and the commencement of Lisheen in Ireland with a production rate of some 26000 tonnes per annum. The effect of this additional supply on the market, coupled to the scheduled expansion of the Alaskan Red Dog operation of some 20000 tonnes per annum, will be considerable, negating the positive effects of the low stock levels which have been maintained over the last few years.

## **2.5 Zinc**

There was a slight improvement ( 5 % ) in the zinc price between US \$ 1023 per tonne in 1998 and the 1999 price of US \$ 1076 per tonne. Opening the year at US \$ 913 per tonne (some US \$ 46 lower than the close of 1998), the price remained reasonably static during January and the early part of February, and finally passed the benchmark price of \$ 1010 in mid-February. Very little movement took place until July when the metal edged upwards to a high of \$ 1130, before falling off to prior levels of around \$ 1065 per tonne. The upward trend was resumed in mid-August and prices rose steadily to a year high of US \$ 1226 in early September. A slight decline in price to around the \$ 1150 level saw out the year where it closed at US \$ 1183,75 per tonne.

Once again, the recent economic crisis in South East Asia affected business in the industrialised “West”, although its effects have not been so severe as expected. Despite the slight increase in stock levels, prices have, as noted above, stayed firm throughout the year. However, analysts predict that the fall in Asian zinc consumption will have long-term effects on end-use physical demand, in both the USA and Europe, extending through to the year 2001. Despite this caution, worldwide zinc demand, particularly as far as zinc-coated steel in the automobile manufacturing sector is concerned, is expected to increased by some 2,1 % per annum up to the year 2008.

On the supply side of the balance equation, zinc mine capacity will grow by some 7,5 % by the end of year 2000. During 1999 the Red Dog operation in Alaska completed its expansion programme to product an addition 175000 tonnes of metal, whilst production at the major Century project in Australia and Lisheen operation in Ireland are scheduled to start in 2000, eventually providing a further combined 600000 tonnes to the market.

Zinc treatment charges in 1999 were US \$ 179 / dmt on a base metal price of US \$ 1100 per tonne with an upscale of 0,20 and a downscale of 0,16.

Zincor agreed to treatment charges of US \$ 167 / dmt on a base price of US \$ 1000 with an upscale of 0,20 and downscale of 0,13. (These new charges are equivalent to a 1998 charge of US \$ 187 / dmt on a base of US \$ 1100.)

New treatment charges, which are generally a good indicator of any supply / demand imbalance, have not yet been announced for the new year. Consequently, most of the smelters are happy to wait for the concentrate balance to shift further in their favour, whilst primary producers (mines) are hoping that the year 2000 will provide some unexpected disruptions which will be to their advantage.

## **2.6 Gold**

The end of the third quarter of 1999 saw a sharp improvement in the gold market, reflected by a very welcome increase in the gold price. This change came after a quarter during which the market remained

under pressure from negative sentiment and fears of continued official sector gold sales. During the second quarter the gold price had slipped to a 20-year low of US \$ 251 per ounce, whilst the average price for that quarter was \$ 259 as against the first quarter average of \$ 273 per ounce. By mid September, however, the market had consolidated around a price of \$ 255 and fears of further downside movement were replaced by more positive views on gold. Subsequent events capitalised on this firmer sentiment and the price rose dramatically by some \$ 80 per ounce in a week, touching \$ 340 early in October. The market remained somewhat volatile towards year-end, reflecting uncertainty as to whether or not producers are likely to buy back parts of their forward price exposures.

Much of the sentiment throughout the year has been ascribed to the changes in the official sales policies of a number of central banks and the International Monetary Fund. Thus the IMF's plan to sell some gold reserves to help important debtor nations, and the Bank of England's announcement on 7<sup>th</sup> May that it planned to sell off more than half (415 tonnes of a total 715 t holding) of its reserves, were widely blamed for the panicky summer collapse. Significant pressure from gold producing nations, particularly South Africa supported by the Mining Industry Associations of Southern Africa and Ghana, resulted in the IMF seeking other means of financing which would not require the sale of gold holdings. On 26<sup>th</sup> September an announcement was made by the members of the European Central Bank, supported by the central banks of the United Kingdom and Switzerland, of a ceiling of 2000 tonnes of gold sales by that group over the next five years. This ceiling includes all sales of gold already announced, specifically by the United Kingdom and Switzerland. The announcement also indicated that the banks would not increase their gold lending positions in the market during this period. Subsequently it has been established that the United States Federal Reserve and Bank of Japan will subscribe to this capping of gold sales within the same limits as previously announced.

Whilst the foregoing obviously affected price movements, note should be taken of the actions of several large gold mining companies. In the first half of 1999 it has been estimated that gold mining companies sold some 252 tonnes of gold as part of their hedging programmes. During the second half of the year the extent of the price rise was increased by uncertainty in the market as to the credit positions of these large companies in proportion to their production.

Looking forward, the gold market remains volatile but with increased interest in, and support for, the metal. On the demand side, Gold Fields Mineral Services is still cautiously optimistic as regards the economic revival in Japan and South East Asia, whilst millennium sales of manufactured golds are forecast to be significant.

There is, however, a pervading degree of uncertainty amongst market participants and some disorder within the gold leasing market. It is believed that this has been caused, at least in part, by some mismanagement of positions in this market and, assuming that official gold lending continues at around current levels, the market should return to a more orderly state in the near future. Should official lenders of gold materially reduce the amounts of gold they are prepared to lend then the market is likely to see further sharp rises in the gold price.

## ***2.7 Silver***

Unfortunately predictions made at the end of 1998, regarding a slight resurgence of interest in silver, have not materialised. In general the metal experienced a quiet year of trading with minimal price fluctuations. Any significant variations in price have generally shown to be a reflection of interest (or the lack of interest) in associated commodities.

Silver started the 1999 year at US \$ 5,595 per ounce, rising to a high of US \$ 5,750 in mid-February, before sliding back to just above the US \$ 5 per ounce until the last week of September. Riding on the back of the increase in the gold price, the metal rose to US \$ 5,71 but quickly dropped back to previous US \$ 5,15 levels by mid-October, ending the year at just under US \$ 5,20 per ounce. The average price realised in 1999 was US \$ 5,22 per ounce, some 5 % lower than the 1998 average of US \$ 5,52 per ounce.

As reported last year, demand for the metal has continued to be at a low level, although there are signs that a slight recovery may result from increased jewellery trade activities in the Far East, reflecting the general economic recovery in that region. A number of traders believe that silver has now reached its realistic price level when compared to its over-valuation in the early nineties and that little, if any, sharp increase in price is forecast for the immediate future. In fact concern has been expressed as to the possibility of central bank silver sales being imminent which would completely reverse the slight supply imbalance built up over the last few years.

## ***2.8 Fluorspar***

The outlook for Acid Grade Fluorspar concentrates remains essentially stable, with European anti-dumping legislation still underpinning the price of acid grade fluorspar imported into European harbours.

Several interesting developments in the fluorspar mining sector took place during 1999, with the closure of a number of "Western" operations and the sale of both South African producers to relatively small private operators. Solvay-Fluor, the owner of Okorusu Fluorspar, continues to play an increasingly dominant role in the international fluorine market, with the take-over of major players.

The demand for Okorusu's concentrates is, therefore, secured well into the future. Okorusu's goals for the year 2000 are to achieve a concentrate purity of 98 %, with a 10% improvement in metallurgical recovery, to be achieved through developing the ability to smooth out fluctuations in ore head grades by increasing blending capacity. To ensure this, a major capital project to complete a new milling plant, fed from three separate run-of-mine stockpiles each containing different ore types, is to be constructed during the year. Two new primary mills will be installed to ensure capacity for blending at optimum ratios.

### 3. EXPLORATION AND PROSPECTING

As can be seen from the following data supplied by the Office of the Mining Commissioner, exploration activities have continued at a relatively high level throughout the year.

	1999	1998	1997	1996
Non – Exclusive Prospecting licences issued	518	464	338	488
Exclusive Prospecting licences awarded	92	178	121	53
Claims registered	176	85	74	158
Applications pending (new and renewals)	56	102	104	323

In addition to the above, two Exclusive Reconnaissance, six Mining, and two Mineral Deposit Retention Licences were granted during 1999. Significant progress has been made at the Mining Commissioner's office in terms of reducing the number of licence applications in progress, despite a slight increase in the number of licences issued.

The Diamond Bill passed through the necessary parliamentary stages during the year and was finally enacted on 30<sup>th</sup> September 1999, and will be implemented with effect from 1<sup>st</sup> April 2000. The Act will effectively regulate and control the holding, transport and further processing of diamonds through a system of licences, approved by the Diamond Commissioner. However, exploration and mining licences will still fall under the jurisdiction of the office of the Mining Commissioner.

No other mining legislation has been promulgated during the year, although a joint committee, comprising of representatives of the Ministry of Mines and the Chamber of Mines, will start work on the revision of the Minerals Act early in the year 2000. The main tasks of the committee will include updating the legislation with regard to current environmental thinking, re-assessing the terms of reference for an effective Minerals Board, ensuring that marine operations are adequately covered, and determining those matters of a nature which need to be amended on a regular basis. It is proposed to remove such generally administrative matters from the Act per se, and create "regulations" which may then be amended by the Minister, without necessarily reverting to Parliament for approval.

The Chamber Prospecting Committee itself met five times during the year and had two consultative meetings with the Geological Survey. Issues of particular importance include the continued funding constraints placed on Geological Survey in terms of staffing and the preservation of extremely valuable and irreplaceable archive materials.

Investigations into waste disposal sites for southern Namibia, based at Luderitz, identified four possible locations which were all subsequently found to be unsuitable. The provision of a suitable site in this region is of great importance to many concerns, including marine mining operations.

One of the most significant developments during the year was the announcement by the Ministry of Mines and Energy to open a large portion of the Sperrgebiet (Forbidden Territory), to the north and east of Oranjemund, for general prospecting. This area has been effectively closed since the early 1900's by previous exclusive agreements with De Beers and its successors. The Chamber welcomed the announcement and assisted in determining areas for prospecting on an equitable basis. Several major exploration companies have expressed interest in the region which may have significant development potential.

Plans are underway, by interested parties and individuals, to draft legislation for the introduction of an Earth Science Professions Act which would regulate professional earth scientists' activities particularly with regard to services rendered to the public.

Despite an international report which stated that world prospecting and exploration spending has declined drastically, investment by prospecting companies in Namibia has remained substantial. According to statistics, expenditure worldwide in 1999 amounted to US \$ 2,7 billion, a significant drop from the estimate of US \$ 5,1 billion in 1997. However, this falling trend, if sustained, would possibly lead to a substantial revaluation of metal commodity prices and the mining industry in general over the medium to long term.

Exploration expenditure of N\$ 174,977 million by Chamber members in 1999 once again showed a significant increase on previous years, with diamond exploration accounting for some 65 % of total expenditure, at N\$ 113 million.

Comparison exploration expenditures ( N\$ millions )	1999	1998	1997	1996
	175	124	97	118

Development work at Anglo American Base Metals' Skorpion Zinc deposit continues to be the most important immediate project in the base metals sector. An additional 10000 m of drilling has been carried, with a further 5000 m scheduled for the first quarter of 2000. Bulk ore samples have been treated in the Skorpion Pilot plant facility at A A Research Laboratories in Johannesburg. Expenditure on the project has amounted to some N\$ 30 million since July 1999. Anglo are looking at formal project approval in mid 2000 and the production of metal in the final quarter of 2002.

Other areas / projects which have attracted significant exploration interest include the Langer Heinrich uranium deposit, where Acclaim Uranium has reached the stage of carrying out a final feasibility study, and Avdale's Otavi mountainland project, whilst interest has also been shown by various companies in re-evaluating a number of dormant mining sites.

#### 4. HEALTH AND SAFETY

Once again, occupational health and safety has continued to receive a high priority at Chamber members' operations, particularly in terms of employee involvement and continuous operational procedures review.

The Namibian Chamber operations were once again active in the National Occupational Safety Association (NOSA) Five Star Grading System, which system is based on the progressive disabling injury frequency rate (DIFR), calculated in terms of the number of disabling injuries and expressed as a percentage of the workforce. Each operation is assessed annually by NOSA and, on the basis of this assessment, is awarded a grading or star rating. Excluding the dormant TCL operations, there are six Chamber member operations registered with NOSA, all of which have Five Star Ratings. Four other Chamber member operations have not yet registered with NOSA but compete in the Chamber Inter-mine safety competition.

For a number of valid reasons the Chamber Safety Committee has approached NOSA with a proposal for the establishment of a Namibian office, run by local personnel. NOSA has expressed interest in the proposal and it is hoped that the office will start early in 2000.

In 1999 Rossing Uranium became the proud recipient of its thirteenth consecutive NOSCAR award, whilst the Elizabeth Bay Mine also holds a NOSCAR award and Auchas Mine has recently achieved NOSCAR status. On 25<sup>th</sup> November, Rosh Pinah was awarded the Tom Muller trophy for the best sustained safety performance, for a period of three years, in the Iscor organisation.

Regrettably, for the third consecutive year, the Chamber had to record one fatality. The accident occurred at Namdeb Mining Area No 1. A comprehensive investigation by loss control personnel resulted in a number of amendments to operational procedures. The issue of continuous review and re-evaluation of procedures and identification of potentially hazardous working areas and operations, as practised at a number of Chamber member operations, has received a high priority at meetings of the Chamber Standing Safety Committee.

On 5<sup>th</sup> November the Chamber was shocked to hear that John Jacobs, recently elected Chairperson of the Environment Committee, had been fatally injured in a vehicle accident. Mr Jacobs was a very valuable member of the Committee and will be sadly missed by his colleagues. As previously noted, Rossing has, as a result, decided to stand down from its NOSCAR status.

The Chamber is proud to report that a successful series of tripartite meetings were held during 1999 with the objective of revising the health and safety regulations contained in the Mines, Works and Minerals Ordinance of 1968. The committee has completed its work and the final draft of the Mine Health and Safety Regulations will be presented to the Minister of Mines by the end of February 2000.

Despite the very unfortunate fatal accident at Namdeb, the Chamber members of the Namibian mining industry still maintain an impressive safety record, as shown by the following :

	1999	1998	1997	1996	1995
Number of accidents	36	52	69	53	66
Fatalities	1	1	1	0	6
Shifts lost per accident	198,53	147,50	113,30	21,66	21,57
Frequency rate	0,46	0,62	0,67	0,51	0,59
Severity rate	90,79	91,54	75,13	11,08	360,10

As mentioned above, the success of occupational health and safety programmes depends upon the involvement of all employees and, in this context, it is fitting to mention the active co-operation and understanding of the MUN as the representative of employees. The Chairperson of the Chamber Safety Committee, W van Rooyen, concurs with the above, noting that this involvement must be encouraged and sustained so that both employers and employees can share the same objectives to make the mining industry the safest employment sector in Namibia. In his report he states : “our challenge, as partners in the health and safety field, is to deliver a year of performance marked by the achievement of zero fatalities”.

The Chamber also subscribes to the promotion of good safety performance and, to this end, conducts two competitions :

**a. The Inter – Mine Safety Competition**

In this competition the operating mines strive to attain the lowest accident frequency and severity rates. The competition is split into two divisions; the A Division for larger mines and B Division for smaller operations.

The winners for the 1999 year were :

A Division	Navachab	combined frequency / severity rate of 0,26
B Division	Elizabeth Bay Mine	“ “ “ “ “ 0,00

Analyses of detailed statistics for all lost - time accidents and non-lost - time incidents were carried out on some 266 incidents during the year. This figure compares well with 1998 when a total of 337 accidents / incidents were analysed. The exercise is helpful to loss control and safety personnel in assisting them to target problem areas, thus helping in setting up procedures and (re) training programmes to prevent future accidents.

**b. The Millionaire Award Scheme**

A Millionaire Award is made to any mining operation which achieves a million fatality – free employee hours and / or shifts.

In 1999 the following awards were made :

Month	Operation	Million Hours	Million Shifts
January	Namdeb Mining Area 1	32	
	Rosh Pinah	18	
March	Namdeb Mining Area 1	32	
April	Rossing Mine	93	
June	Rossing Mine	94	
	Navachab	9	
	Namdeb Mining Area 1	1	
July	Namdeb Mining Area 1	2	
August	Rossing Mine	95	
September	Namdeb Mining Area 1	3	
October	Rosh Pinah	19	

November	Namdeb Mining Area 1	4	
December	Namdeb Mining Area 1	5	
	Rossing Mine	96	12

Several Chamber Member operations have maintained their world-class records, including the following :

Auchas Mine	6,71 million fatality-free hours since inception on 1 <sup>st</sup> June 1990
Navachab Mine	9,71 million fatality-free hours since inception in November 1989
Rosh Pinah Mine	19.25 million fatality-free hours since 1 <sup>st</sup> December 1982
Rossing Uranium	96,04 million fatality-free hours since 5 <sup>th</sup> March 1983 (Note : this achievement has been nullified by the road fatality in November 1999)

Annual accident statistics for the mining members of the Chamber are shown in Annexure G

### **STDs / HIV / AIDS**

In 1999 the Chamber formally adopted the Oranjemund Health Education Project (OHEP) as the Occupational Health and Education Awareness Programme (OHEAP). Okorusu Fluorspar (Pty) Ltd, as part of its social responsibility programmes and on behalf of its owners Solvay Fluor, has committed itself to sponsoring the programme, to be managed by the Chamber of Mines. In July 1999 a Coordinator for the programme was appointed and good progress has been made with its implementation during the latter half of the year.

As with the OHEP programme, OHEAP is not exclusively devoted to HIV / AIDS but each month has a designated theme, including : diabetes, malaria, TB, alcohol and drug addiction, child abuse, stress and hyper-tension, and healthy lifestyles. The effective implementation of the Programme relies on the establishment, within each participating company, of a Peer Educators' group who receive training in disease prevention and counselling services. The primary objective is then, through regular information meetings, promotional activities and counselling, to develop awareness by employees which would then permeate through to their dependents and, eventually, to the immediate community. Tribute must be paid to these Peer Educators as, in addition to their normal duties, they spend considerable private time counselling and informing sufferers, local communities and, particularly, the younger generation as to the ramifications of these life-threatening diseases.

In addition to the participating mining operations, OHEAP has been established in other non-mining companies, particularly Namport and fishing companies in both Walvis Bay and Luderitz. The OHEAP Coordinator has also informed a number of retail companies in Windhoek of the Programme and considerable positive response has been received.

## 5. EMPLOYEE RELATIONS

Employee relations, particularly in the fields of health and safety, between employer mining company members of the Chamber and employees, as represented by the Mineworkers Union of Namibia, have, in general, continued to be cordial whilst wage negotiations have been conducted in a professional manner.

Namco, through a programme of employee participation, entered into a formal Recognition Agreement with the MUN. Various other agreements have been entered into during the year, including agreements on such issues as job evaluation, appointment and remuneration of full-time shop stewards and safety representatives, Union officials' leave periods, and transport arrangements.

The migrant labour system, previously operating at Namdeb, was abolished during June 1999. A special committee, consisting of company and union representatives, was set up to deal with this major issue. As a result of the exercise some 1600 employees in the system were offered voluntary early retirement / retrenchment packages.

Rossing Uranium introduced an Alcohol and Drug Prevention Management Policy and Procedure in May 1999. This programme involves random testing of all employees which has been successful in raising employee awareness of the effects of alcohol and drug abuse to the stage where employees are voluntarily seeking counselling. The long-running Job Evaluation Part II dispute was satisfactorily concluded during the year.

Recognising that effective communications are essential within an organisation, Namdeb commissioned an internal communications audit during the year. Although the results, as presented to the mine and union executives, showed that satisfactory communications exist, an action plan has been prepared to improve communications systems.

One informal meeting of the Mining Cooperation Council took place during the year, which was conducted in an extremely open, frank manner. It was agreed that future meetings would devolve on the signing of a joint statement of intent, which has been drafted for the attention of both parties. Both the Chamber Council and the central office of the MUN have expressed their hope that these meetings will become more frequent in the new millennium.

Unfortunately, as generally noted in the section on Mineral Markets, the mining industry worldwide has continued to face adverse market conditions with the result that a number of companies are re-assessing their businesses. Besides revaluation, and possibly redesign, of systems and procedures, companies are tending to concentrate on their core business and "out-source" non-core activities. Inevitably such exercises are accompanied by workforce reductions, generally accomplished through the provision of early retirement or voluntary departure packages. Fortunately, however, a number of employment opportunities have resulted from these "out-sourced" activities. ( Chamber employment statistics are shown in Annexure F. )

## 6. RELEVANT LEGISLATION

During 1999 Chamber members, through their representatives on the Labour Committee, have played a major role in debating and advising on proposed changes to labour-related legislation. Although a few issues have not yet been finally resolved, the draft Labour Amendment Act has been passed through the Labour Advisory Council and sent to the Ministry of Labour for eventual presentation to Cabinet and Parliament. The Chamber is currently preparing amendment proposals with regard to continuous operations which, it is hoped, may be incorporated in the draft Act before it is promulgated.

The Chamber Labour Committee has also extensively debated the National Pension Fund issue with regard to the Social Security Act. The Chamber and Namibian Employers' Federation representatives on the Social Security Commission have also been deeply involved in discussions on this very important piece of legislation. It is hoped that the matter will be progressed to a satisfactory conclusion during the first half of 2000.

In terms of the Affirmative Action Act, promulgated in 1998, all employers with a staff in excess of 50 persons are required to submit a three year Affirmative Action Plan to the Employment Equity Commission, upon which a representative of the Chamber serves, by 6<sup>th</sup> February 2001. In order to assist employers, and to standardise where possible, the Employment Equity Commission has issued a comprehensive "guideline" document and are organising training courses for both public and private sector operations during the first and second quarters of 2000. Most companies are now setting up special committees to deal with this new issue and to assess the potential problem areas and ramifications of the Affirmative Action Plan.

As has been noted in the section on Safety, the Chamber has played a leading role in the drafting of the new Mine Health and Safety Regulations. A committee, comprising representatives of the Chamber and the Ministry of Mines, will now start to revise the Minerals Act, No 33 of 1992, which exercise will result in an Amendment Act and relevant Regulations.

The mining industry has an almost proprietary interest in the development of sensible environmental policies and appropriate legislation. The industry is also aware of the problems in drafting legislation which will impinge on the activities of all business, both large and small.

The Chamber Environmental Committee has, therefore, extensively debated draft legislation in the form of the Environmental Management, Environmental Investment Fund, and Pollution Control and Waste Management Bills. Constructive criticism and recommendations have been forwarded to the relevant authority and a healthy working relationship between the Chamber and Ministry of Environment officials has been developed. Concurrently the Committee has comprehensively reviewed various proposals concerned with rehabilitation issues and examined various systems of self-monitoring and appraisals from other mining communities worldwide.

## **7. INTER – MINE VISITS**

As in previous years, the Council of the Chamber continued with its programme of holding meetings outside of Windhoek. An extremely interesting and successful meeting was held at the premises of Salt and Chemicals at Walvis Bay on 29<sup>th</sup> July. As few Council members have been involved in salt – winning operations, the technical section, with particular reference to environmental considerations, of the visit was of great interest.

The Safety Standing Committee also held a meeting at Navachab Mine in May which included a visit to the pit and plant operations, with special emphasis on safety procedures and risk management.

The Labour Standing Committee held a meeting at the Okorusu Fluorspar Mine in August, which provided members with an opportunity to study labour resource development programmes from a different perspective.

Although not strictly “inter-mine”, the Chamber is a founding member of the Mining Industry Associations of Southern Africa (MIASA). The General Manager attended two meetings of the organisation during 1999, the second of which interlinked with the Council of SADC Mining Ministers’ meeting in Arusha, Tanzania. A number of issues, relevant to all SADC member countries, were discussed and position papers on selected topics presented at the Ministers’ meeting. A significant step forward was taken at the Arusha meeting when, through the initiative of MIASA, the Council of Ministers recorded their opposition to the contemplated sales of bullion by the IMF and other Central Banks.

ANNEXURE A – AVERAGE ANNUAL METAL PRICES

<b>Metal</b>	<b>Quoted as</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
Copper (cash wirebars)	US \$ / metric ton	2936	2297	2277	1653	1571
Gold	US \$ / troy ounce	384	388	330	294	279
Lead	US \$ / metric ton	630	774	623	528	503
Silver	US \$ / troy ounce	5,20	5,19	4,97	5,52	5,22
Uranium oxide	US \$ / pound					
	Restricted	11,32	15,50	12,09	10,41	10,20
	Unrestricted	8,37	14,02	10,57	9,01	8,25
Zinc	US \$ / metric ton	1030	1025	1312	1023	1076

## ANNEXURE B - THE MEMBERS OF THE CHAMBER

As at 31 December 1999

	<b>Representative</b>	<b>Alternate</b>
<i>CLASS A FOUNDER MEMBERS</i>		
1. Namdeb Diamond Corporation (Pty) Ltd	A Ashworth	D A Cochrane
2. Rossing Uranium Ltd	A J Hope	W Haymann
3. Tsumeb Corporation Ltd	(In Provisional Liquidation)	
<i>CLASS A MEMBERS</i>		
1. De Beers Services (Pty) Ltd	J P Murphy	M J Lubbe
2. Namibia Minerals Corporation	K Kapwanga	P Elindi
3. Ocean Diamond Mining Holdings Ltd	D Gadd-Claxton	
<i>CLASS B MEMBERS</i>		
1. Erongo Mining & Exploration Company Ltd	F M Bethune	L J H Fourie
2. Karibib Mining & Construction Company Namibia Ltd	H J J Bam	A J A Meyer
3. Okorusu Fluorspar (Pty) Ltd	M T Dawe	H J Grobler
4. Rosh Pinah Zinc Corporation (Pty) Ltd	A W Diedericks	M D Garbers
<i>CLASS C MEMBERS</i>		
1. Diamond Fields (Namibia) Ltd	A Walden	
2. Diaz Point Explorations (Pty) Ltd	K Elford	A J Cornelissen
3. Salt & Chemicals (Pty) Ltd	R E Stanton	L Frielingsdorf
4. Salt Company (Pty) Ltd	J Klein Jnr	J Klein Snr
<i>CLASS D MEMBERS</i>		
1. Acclaim Uranium N.L	M Mason	R Evans
2. Ambase Exploration Namibia Ltd	E E Freyer	K P Knupp
3. Anglovaal Namibia (Pty) Ltd	P J A Lombard	A H Matthews
4. BHP Minerals International Exploration Inc.	J Andrew	D Spatz
5. Billiton S A Ltd	W H J de Wet	J C Toerien
6. Brazil Benguela Exploration & Finance (Pty) Ltd	H C Benecke	
7. Cominco (Namibia) Ltd	M C Joudrie	
8. Groundwater Consulting Services (Pty) Ltd	V Stuart-Williams	L Blaine
9. Iscor Namibia (Pty) Ltd	M Kilbride	D J Alchin
10. Kalahari Gold & Copper (Pty) Ltd	R Timmins	T J Smalley (Dr)
11. Kimberlite Resources NL	G E Taylor	N Forrester
12. Mount Isa Mines Namibia (Pty) Ltd	R D M Wilson	
13. Namibian Copper Joint Venture (Pty) Ltd	P D Prentice	W Holly
14. Onganja Mining Company (Pty) Ltd	R G Carr	E A Barbour
15. Palfi, Holman & Associates	A G Palfi	B Teigler (Dr)
16. Randgold & Exploration Company Ltd	D M Bristow (Dr)	A J Reynolds
17. Reunion Mining (Namibia) (Pty) Ltd	P Smith	N Green

18. Rio Algom Exploration	M Thicke	
19. Rio Tinto Namibia (Pty) Ltd	K Fox	
20. Southern Cross Exploration NL	B Ganke	P Lavers
21. Tsongoari Exploration (Pty) Ltd	D Newman	J van der Merwe

*ASSOCIATE MEMBERS*

	<b>Representative</b>	<b>Alternate</b>
1. African Portland Industrial Holdings Ltd	H J Hebbard	M Liefferink
2. African Wire Ropes (Pty) Ltd	S Bredenkamp	E Heymann
3. CSO Valuations Namibia (Pty) Ltd	N P Stanford	R J Snyders
4. Draftcad cc	I Berning	R G Tobich
5. Geo Consult	D O’N Mathews	
6. Kuehne & Nagel (Pty) Ltd	H Herrlich	F Cyriax
7. L van Schalkwyk	L van Schalkwyk	I D Kotze
8. NEC Investment Holdings (Pty) Ltd	J A Bruckner	N Bruckner
9. Peter Nutt & Associates	P Nutt	
10. Phikwe Services cc	P B Gough	G C Cooper
11. Rex Quip cc	A Lang	C Lang
12. Rosond (Cape) (Pty) Ltd	P Stoppel	
13. Roy McG Miller	R McG Miller (Dr)	
14. Selected Hardware	H D Etzold	D Etzold
15. SGS South Africa (Pty) Ltd	F J van Rooyen	G Wurr
16. Siemens (Pty) Ltd	G Langmaak	V Trubenbach
17. Small Miners’ Association of Namibia	J Shafashike	
18. Sonnex Investments (Pty) Ltd	J Quarmby	A Hardwick
19. Svedala Southern Africa (Pty) Ltd	I A E Williamson	J Novoselac
20. Trust & Mining Company (Pty) Ltd	D O’N Mathews	P Mathews
21. Woker Freight Services (Namibia) (Pty) Ltd	K H Woker	A van Ginkel

*HONORARY LIFE MEMBERS*

1. D O’N Mathews
2. J Berning
3. Hon A Toivo ya Toivo

<i>SUMMARY</i>	<b>1999</b>	<b>1998</b>
Class A founder members	3	3
Class A members	3	3
Class B members	4	4
Class C members	4	5
Class D members	21	21
Associate members	21	20
Honorary Life members	3	2
<b>TOTAL</b>	<b>59</b>	<b>58</b>

## ANNEXURE C – THE COUNCIL OF THE CHAMBER

as at 31 December 1999

	<b>Member</b>	<b>Alternate</b>
<b>Class A Founder members</b>		
Namdeb Diamond Corporation (Pty) Ltd	A Ashworth D A Cochrane	G Enkara F J P Ndoroma
Rossing Uranium Ltd	A J Hope W Haymann	C V Kauraisa B K Paulino
Tsumeb Corporation Ltd	Nil	Nil
<b>Class A members</b>		
De Beers Services (Pty) Ltd	J P Murphy	M J Lubbe
Namibia Minerals Corporation	K Kapwanga	P Elindi
Ocean Diamond Mining of Namibia	D Gadd-Claxton	
<b>Class B members</b>		
Erongo Mining & Exploration Company Ltd	F M Bethune	L J H Fourie
Karibib Mining & Construction Company Namibia Ltd	H J J Bam	A J A Meyer
Okorusu Fluorspar (Pty) Ltd	M T Dawe	H J Grobler
Rosh Pinah Zinc Corporation (Pty) Ltd	A W Diedericks	M D Garbers
<b>Class C members</b>	R E Stanton	
<b>Class D members</b>	D Newman	V Stuart-William
<b>Associate members</b>	D O’N Mathews	

### ***The Council met on the following dates :***

21 January 1999  
05 March 1999  
03 June 1999  
29 July 1999  
22 September 1999  
16 November 1999

**The Executive Council Committee was not constituted during 1999**

**ANNEXURE D – THE STANDING COMMITTEES OF THE CHAMBER**

as at 31 December 1999

**The Communications Committee**

A J Hope ( Chairperson )	Rossing Uranium Ltd
H Mbako	Namdeb Diamond Corporation (Pty) Ltd
G Sekandi	Rossing Uranium Ltd
K Kapwanga ( by invitation )	Namibia Minerals Corporation

**The Environment Committee**

P P Crowther	Rosh Pinah Zinc Corporation (Pty) Ltd
J Daub	Erongo Mining & Exploration Company Ltd
P Liebenberg	Ministry of Mines & Energy
A Macuvele	Ministry of Mines & Energy
V Malango	Ministry of Mines & Energy
G McGregor	Namdeb Diamond Corporation (Pty) Ltd
J Midgley	Namibia Minerals Corporation / O D M
D Newman	Tsongoari Exploration (Pty) Ltd
V Petzel	Geological Survey (MME)
A Walden	Diamond Fields Namibia
R D M Wilson	Mount Isa Mines Namibia (Pty) Ltd
M Figuera ( by invitation )	Ministry of Environment & Tourism
J McCann ( by invitation )	Ministry of Environment & Tourism

**The Labour Committee**

D G Whitcombe (Chairperson)	Erongo Mining & Exploration Company Ltd
B Dorrenbacher	Okorusu Fluorspar (Pty) Ltd
P Elindi	Namibia Minerals Corporation
L Gwala	Rosh Pinah Zinc Corporation (Pty) Ltd
C Horne	Ocean Diamond Mining
R Hoveka	Rossing Uranium Ltd
J Klein Jnr	Salt Company (Pty) Ltd
T Maharero	Karibib Mining & Construction Co Namibia Ltd
S Nekundi	Namdeb Diamond Corporation (Pty) Ltd
G Swartz	Salt & Chemicals (Pty) Ltd

**The Mine Surveying Committee**

D F Hull (Chairperson)	Consultant
P P Crowther	Rosh Pinah Zinc Corporation (Pty) Ltd
J Daub	Erongo Mining & Exploration Company Ltd
R N Isaaks	Ministry of Mines & Energy
A M Muller	Namdeb Diamond Corporation (Pty) Ltd

M Sorocznski

Rossing Uranium Ltd

### **The Prospecting Committee**

D Newman (Chairperson)  
D Alchin  
F Badenhorst  
R G Carr  
M C Joudrie  
P J A Lombard  
D O’N Mathews  
A Macuvele  
A Palfi  
G I C Schneider  
J Shafashike  
M Thicke  
G Viviers  
A Walden  
R D M Wilson

Tsongoari Exploration (Pty) Ltd  
Imcor Tin (Pty) Ltd (Rosh Pinah Mine)  
Erongo Mining & Exploration Company Ltd  
Onganja Mining Company (Pty) Ltd  
Cominco  
Anglovaal Namibia (Pty) Ltd  
Trust & Mining Company (Pty) Ltd  
Ministry of Mines & Energy  
Palfi, Holman & Associates  
Geological Survey (MME)  
Small Miners’ Association of Namibia  
Rio Algom Exploration  
Namdeb Diamond Corporation (Pty) Ltd  
Diamond Fields Namibia  
Mount Isa Mines Namibia (Pty) Ltd

### **The Safety Committee**

W J van Rooyen (Chairperson)  
A Angula  
W B Coetzee  
J Crafford  
R Gevers  
J Horne  
H J P Hough  
G Hugo  
B Keague  
P J Liebenberg  
J Midgley  
B Nel  
T Roussouw

Rossing Uranium Ltd  
Mineworkers Union of Namibia  
Rosh Pinah Zinc Corporation (Pty) Ltd  
Ministry of Mines & Energy  
Okorusu Fluorspar (Pty) Ltd  
Ocean Diamond Mining  
Salt & Chemicals (Pty) Ltd  
Erongo Mining & Exploration Company Ltd  
National Occupational Safety Association  
Ministry of Mines & Energy  
Namibian Minerals Corporation  
Rubicon Security / T C L  
Namdeb Diamond Corporation (Pty) Ltd

ANNEXURE E – BODIES ON WHICH THE CHAMBER WAS REPRESENTED DURING 1999

	<b>Representative</b>	<b>Alternate</b>
The Ancillary Rights Commission	D O’N Mathews	
The Board of Trustees of the Namibian Institute of Mining and Technology	J P Murphy J C Rogers	
The Council of the Polytechnic of Namibia	J C Rogers	
The Employment Equity Commission	S Nekundi	P Elindi
The Geology Advisory Board UNAM	D Newman	
The Labour Advisory Council	B Paulino	
The Minerals Development Fund Control Board	J C Rogers C Kauraisa	D Newman
The Namibian Employers’ Federation	J C Rogers	
The Namibian Ports Authority Board	J C Rogers	
The Namibian Transport Advisory Board	J C Rogers	
The Namibian Water Corporation	C P Sivertsen	F M Bethune
The National Energy Council	A J Hope	J C Rogers
The National Vocational Training Board	E D G Mueller	H Beykirch
The President’s Economic Advisory Council	J P Murphy	
The Social Security Commission	B Paulino	

ANNEXURE F – CHAMBER MINING MEMBER ANNUAL LABOUR STATISTICS

<b>Year</b>	<b>Number of employees as at 31 December</b>	<b>Total remuneration paid (Namibian Dollars)</b>
1981	19240	120804606
1982	17300	132157914
1983	16595	139705600
1984	15624	139441000
1985	14869	152825000
1986	14428	165442000
1987	12905	184034000
1988	13073	241553000
1989	12776	283522000
1990	13605	349018000
1991	12265	387860000
1992	11441	385464401
1993	9854	381155796
1994	9693	397789557
1995	9775	458887020
1996	8540	457009217
1997	8214	533967714
1998	7686*	592754266
1999	5427	478130587

\* Includes Tsumeb Corporation at time of closure

ANNEXURE G – CHAMBER MINING MEMBER ANNUAL ACCIDENT STATISTICS

<b>Year</b>	<b>Number of Injuries</b>	<b>Rate per 1000 employees</b>	<b>Fatalities</b>	<b>Rate per 1000 employees</b>
1981	128	6,65	11	0,57
1982	90	5,20	9	0,52
1983	98	5,81	6	0,36
1984	54	3,46	10	0,64
1985	51	3,43	6	0,40
1986	36	2,50	4	0,28
1987	31	2,40	1	0,08
1988	39	2,98	7	0,54
1989	40	3,13	5	0,39
1990	48	3,53	1	0,07
1991	41	3,34	2	0,16
1992	37	3,23	5	0,44
1993	30	3,04	3	0,30
1994	26	2,68	4	0,41
1995	28	2,86	6	0,61
1996	25	2,93	Nil	-
1997	29	3,53	1	0,12
1998	20	2,60	1	0,13
1999	18	3,32	1	0,18

ANNEXURE H - PAST PRESIDENTS AND VICE PRESIDENTS

**THE ASSOCIATION OF MINING COMPANIES OF SOUTH WEST AFRICA**

<b>Year</b>	<b>President</b>	<b>Vice President</b>
1969	J P Ratledge	D Borchers
1970	J P Ratledge	D Borchers
1971	W H Bailie	H J van den Hoven
1972	W H Bailie	G Nisbet
1973	J L P MacKenzie	K E Mantell
1974	J L P MacKenzie	K E Mantell
1975	J L P MacKenzie	J Berning
1976	J Berning	M H Rogers
1977	J Berning	J O Rochards
1978	J O Richards	B R Woolfe

**THE CHAMBER OF MINES OF NAMIBIA**

<b>Year</b>	<b>President</b>	<b>Vice President</b>
1979	J O Richards	B R Woolfe
1980	G R Parker	C A Gibson
1981	C A Gibson	D B Hoffe
1982	D B Hoffe	H A R Meiring
1983	H A R Meiring	C A Macaulay
1984	C A Macaulay	D B Hoffe
1985	H A R Meiring	J O Richards
1986	J O Richards	C A Macaulay
1987	C A Macaulay	H A R Meiring
1988	H A R Meiring	R A A Gower
1989	R A A Gower	M P Bates (Dr)
1990	M P Bates (Dr)	P J V Kinver
1991	P J V Kinver	J C A Leslie
1992	J C A Leslie	R A A Gower
1993	T K Whitelock	A R de Beer
1994	A R de Beer	S James
1995	S James	M J C Wittet
1996	M J C Wittet	A R de Beer
1997	A J Hope	J P Murphy
1998	J P Murphy	K Kapwanga
1999	K Kapwanga	F M Bethune