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TUMULTUOUS YEARS 1990–1994

Hanson acquired its controlling interest in Renison Goldfields Consolidated (RGC) in 1989. This year and 1990, its first full year of ownership, were favourable ones for the group. Profit after tax and before extraordinary items in 1989 was $100 million, rising to $116 million in 1990. The company recorded a return on shareholders' funds close to 30 per cent in each year. The two years were the best financially that RGC had recorded since its establishment in 1981. Campbell Anderson awarded employees with a bonus equivalent to one week's salary. It was an encouraging start to Hanson's coincident investment in an Australian company flowing from its acquisition of Consolidated Gold Fields in the United Kingdom. However, global economic conditions deteriorated in 1991 and 1992, with recessionary conditions as well as tumultuous political and military events, including the Gulf War.

The implications of the volatile and uncertain conditions for commodity prices and, as such, RGC's financial performance, were severe. Mineral sands, the largest contributor to group earnings, suffered straitened financial performance over the next five years. In an internal memorandum in 1991, Bryan Ellis, group general manager of marketing, warned of 'formidable hurdles' for mineral sands, including an oversupply of titanium dioxide feedstocks, pressure on the zircon price and RGC's diminishing competitive position in synthetic rutile production.[1]

1 Memorandum, Bryan Ellis, AMC Mineral Sands Marketing, 4 June 1991, Renison Goldfields Consolidated Archives (RGCA), Box 3536.

From a financial contribution of $176 million in 1990, earnings more than halved in 1991 and were then either negative or marginally positive for the next three years.

Relative to 1989 and 1990 the average tin price received by RGC declined by over 20 per cent in the following two years; the copper price declined by over 12 per cent and, while mineral sands prices remained reasonably stable in 1991, there were major declines in the prices of rutile and zircon.[2] The adverse impact of lower prices on revenue was compounded by lower sales volumes, including the forfeiture of sales by some customers, particularly for mineral sands. Combined zircon, rutile and synthetic rutile sales in 1991 and 1992 were 40 per cent lower than in the prior two years.

These factors had an adverse effect on the margin and profitability of the individual divisions and RGC as a whole. Porgera gold mine, which commenced production in 1990, was the major earnings contributor to RGC for the next five years. Despite this RGC was profitable—and only marginally so—in two of the next four years. RGC's profit in 1991 reduced by nearly two-thirds compared with 1990, while accumulated losses were recorded through to 1994 (see Table 19.1). The financial circumstances of RGC led to considerable scrutiny and disquiet on the part of Hanson. This included questioning the veracity of the diversified business model and a process of asset divestitures, including the consideration—urged by Hanson—for the sale of either mineral sands or Porgera, as well as the implementation of 'survival plans' at both Renison and Mount Lyell. The market challenges for management were added to by the need to develop Eneabba West as part of the continuation of this operation for the production of ilmenite that, in turn, was necessary to underpin synthetic rutile production. RGC and its joint venture partners had to contend with claims by the Government of Papua New Guinea to increase its interest in the Porgera project from 10 per cent to 30 per cent, with a potential threat of expropriation of part of the interest held by the joint venture partners.

Meanwhile, RGC management was also investigating means by which the Hanson shareholding could be reduced or placed with others. As conveyed in the previous chapter, a major issue arose at board level in 1993 when Hanson applied to the Foreign Investment Review Board, without first advising the independent directors, to overturn RGC's

2 Renison Goldfields Consolidated Limited, *Annual Report 1993*, pp. 22–24. The zircon price halved over 1992 and 1993 compared with 1990.

naturalised status. It would be a dramatic period for the company, with only a partial restitution in its financial performance by 1996. At that stage, there had been a change of managing director and a Hanson director appointed chairman.

…

An *Economist* article on Hanson in the possession of an RGC executive had the following section underlined:

> In Hanson, the budget, once agreed, is a contract between business managers and headquarters. Each month's results are picked over in the businesses's board meeting, with a head-office manager present in a non-executive role. Any shortfall must be explained. If headquarters is uneasy with the excuses given, it sends a 'flying squad' of accountants to check it out … Failure, on the other hand, leads to dismissal.[3]

In another indication that the environment under the new shareholder may be different, the same executive retained and made notations on the following article from the *Financial Times* referring to Lord Hanson and Lord White, the two titular heads of the Hanson empire:

> [The] Hanson-White relationship has two weaknesses which could be even more significant, according to those who have worked closely with them. The first is vanity. Employees are berated for not washing their hair, or for having dandruff on their collars. Lord Hanson's receding hairline is a matter of constant attention. He is fascinated by trichology—a medical study of hair loss. After attending a clinic for hair loss, he hired a trichologist to work on the hair of his directors. 'We were encouraged to go once a fortnight,' says one. 'It was part of Lord Hanson's desire for respectability. We had to look good. I think he's a little insecure.' … Former colleagues say the second weakness is the company's pursuit of acceptability, recognition and a place in the very corporate establishment White and Hanson have crusaded against.[4]

RGC was to experience elements of this inquisitorial approach, particularly from its deputy finance director, RA (Ross) Chiese—if not a concern with trichology—in its early encounters with Hanson personnel.

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3 *The Economist*, 25 May 1991.
4 *The Financial Times*, 20–21 July 1981.

In the early 1990s, Hanson's concerns with the financial state of the RGC business related to the high level of debt and exposure to foreign currency movements to the extent that the company could be viewed, in Hanson's perspective, as a 'currency play'.[5] Chiese sought frequent and detailed information on budgetary and other matters from RGC management. He undertook operational visits, including one in 1991. He reported back to Cotton, then an executive of Hanson and later deputy chairman and chairman of RGC. In one set of correspondence, Chiese observed:

> I had a much more satisfactory visit this time and have formed a more favourable view of the managements abilities, although the financial thrust of the company is not as much at the forefront as it would be say in Hanson and undoubtedly the budget has been constructed more as a possible target than an absolute deliverance.[6]

He assessed that Porgera was progressing well and that the Lucky Draw gold mine, closed in August 1991, had been a successful investment. There was much in his assessment that was not favourable. The mineral sands division was viewed as 'a drain on RGC resources … loses A$27 million after interest in 91/92 and A$13m in 92/93'.[7] Chiese's inquisitorial approach led to a request for attendance at an RGC board meeting. This tested Anderson's patience:

> Your additional request to attend a Board Meeting is clearly something which is out of the ordinary and a request which I, having discussed with the Chairman, must unfortunately decline. Although you are an employee of our largest shareholder, Hanson does already have three appointments to the Board and as far as I am aware these appointments provide a satisfactory communication to Hanson. It never has been in the past, nor do I suggest it should be in the future, appropriate for additional attendees at such meetings … Might I repeat, yet again, my request that for the sake of good order in the relationship between our two companies you initially direct inquiries of a non routine nature to myself.[8]

5 AGL Alexander to C McC Anderson, Treasury Matters, 19 February 1991, RGCA, Box 17848, RGC 28661.

6 To AGLA [AGL Alexander]/ARC [Tony Cotton] from RANC [Ross Chiese], Renison Budget Review 1991/92, p. 4, RGCA, Box 5336.

7 ibid.

8 Telex to RA Chiese, Hanson Plc London from Campbell McC Anderson, 30 October 1990, RGCA, Box 973.

Chiese became an alternate director to Cotton. His approach in this capacity at board meetings was no less terrier-like. He was critical of the separation of the marketing function in Sydney from operations. He peppered management with his observations and questions, which related to a range of matters, including stock levels being in excess of requirements, budgetary settings appearing optimistic, the lack of success of exploration and his view that administrative expenditure needed to be reined in.[9]

Table 1. Renison Goldfields Consolidated group and divisional financial performance, 1990–1998.

$m	1990	1991	1992	1993	1994	1995	1996	1997	1998
Group operating profit/(loss) after tax and extraordinary items	116.0	25.3	–10.1	–24.4	1.8	97.4	142.8	–78.0	–46.1
Divisional contribution to results									
Associated Minerals Consolidated	176.6	67.2	–1.0	1.3	–5.5	41.5	93.3	85.1	69.6
Renison Tin	1.2	–12.7	–1.7	2.0	–2.7	–6.0	–1.0	–8.6	5.4
Mount Lyell Copper	–10.1	–1.2	4.1	1.1	11.0	19.6			
Koba Tin	9.3	2.1	4.9	8.3	2.0	4.4	8.7	10.9	25.4
Porgera Gold		68.6	103.0	59.0	66.5	42.9	37.3	43.7	35.6
Lucky Draw Gold	18.2	5.9	0.7	0.5					
Pine Creek Gold	0.8	–6.7	0.9	–1.8	–3.1	1.6			
Paddington Gold						–0.5	–5.7	–1.0	14.9
NGG Gold	3.5	–3.5							
Henty Gold								–0.4	–2.5
Thalanga Base Metals						–0.7	6.6	2.5	–6.5
Kundana Gold						1.0	20.4	12.0	10.2
Narama Coal				6.5	13.3	12.0	10.6	11.3	10.3
Trading	0.8	0.5	0.5	0.4	0.1	0.4	–0.1		
Investments	4.2	4.0	0.3						

Financial information includes RGC and the gold interests held through RGC's approximate 56 per cent shareholding in Goldfields Limited after 1995. The Paddington, Thalanga and Kundana interests were all acquired as a result of the 1995 acquisition of Pancontinental Mining.

Sources: RGC annual reports, 1991 to 1997; 'Information Memorandum in Relation to a Recommended Merger by Scheme of Arrangement between RGC Limited and Westralian Sands Limited', 1998.

9 ibid. Many of the observations were dutifully handled by management, for example, explaining stock levels of concentrate that were in excess of three months of production requirements because some had higher uranium and thorium levels and, as such, needed to be blended.

Chiese expressed concerns as part of the budgetary review process of production problems at Renison, Mount Lyell and Pine Creek, and remarked on the 'very expensive closure' of the Nelesbitan gold mine in the Philippines.[10] In preparations for the 1992 financial year budget, he observed to his Hanson colleagues that 'the cash flow deficit for 1990/91 is projected at A$242m which has increased net debt to A$443m' with a consequent gearing of 'almost 100%' and a 'return on capital employed of about 6%'.[11] Chiese's view was that the budget for the 1992 financial year had 'more downside than upside' and that the share price was 'over-valued'. Further, his assessment was that the Renison operation 'will probably not survive and further reductions may be needed at Mount Lyell'. Accordingly, cash needed 'to be raised from disposals, [with] further reductions in working capital and development expenditure … required to reduce the gearing'.[12]

The assessment by the new shareholder was conveyed starkly:

> The company itself has got itself into a severe problem in that it is too highly geared, a dropping EPS [earnings per share], ROCE [return on capital employed] at AMC [Associated Minerals Consolidated] is far too low (and likely to be so for the next couple of years) the interest bill is crippling and there is little prospect of higher profits unless gold and mineral sands prices increase. It has therefore nowhere to go at present … The management do not appear to have 'got the message' regarding cash and cash flow management, whether they understand that the budget is a commitment and <u>not</u> necessarily a target, only time will tell. Without doubt, they made an over-optimistic judgement in its present form, at least AMC is well set for any improvement in its market position.[13]

Christopher Collins wrote to Tony Alexander on this matter, in the context of prevailing RGC debt levels:

> To have a target of reducing net gearing to 110% shows just what a problem the company faces. Until this gearing has been significantly reduced, Renison will be exposed to constant financial blizzards. As far as the strategy of a diversified mining

10 To AGLA [AGL Alexander]/ARC [Tony Cotton] from RANC [Ross Chiese], 14 June 1991, RGCA, Box 17848, RGC 28661.

11 ibid., p. 2.

12 ibid.

13 ibid., p. 8, emphasis in original.

> house is concerned there is one shareholder who has considerable reservations about the validity of this policy. It certainly does not look too hot at the moment. In light of these views, I do not see why it is a waste of time to appraise the reduction of the business into two main streams. Would you discuss this further with Campbell and Max … We remain unconvinced that enough is being done and we strongly suspect that when all the financial appraisals have been completed (again hopefully well ahead of the next Board Meeting) our views will be proved correct.[14]

The perspectives of the Hanson-appointed directors and those of other directors were often at marked variance. In July 1990, Anderson reported on a discussion with Hanson's chief operating officer, Alexander. The board minutes record that Alexander had emphasised the 'desirability of a steadily increasing profit' from Hanson's investment in RGC. This reflected an industrial company perspective, but one not necessarily relevant to a mining company where demand, commodity price and unit cash costs are all factors that could come into play in influencing the earnings profile.

Anderson, imposing and tall of stature, with an intellectual and verbal felicity to match, exercised great forbearance at times to numerous Hanson questions and observations. In this case, his observations were recorded as follows:

> Although emphasising that in the mining industry, where operations are susceptible to the vagaries of world metal markets, a continually increasing profit was not always achievable, the Managing Director fully accepted the benefits to all shareholders of progressive profit increases and confirmed that all reasonable efforts would be taken during the Budget year to achieve a profit increase.[15]

On another occasion, Anderson was supportive of a management recommendation to secure mining leases in the United States even though they may not come into production for at least 10 years. For Collins as a Hanson director, this proposal was 'difficult', as the expenditure did not comply with Hanson's preferred payback period of four years. Anderson suggested that any payback considerations should also be made

14 CD Collins to AGL Alexander, Renison, 1 March 1991, RGCA, Box 17848, RGC 28661.

15 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 26 July 1990, p. 16, RGCA, Box 11329, BRD38/04.

on the basis of the implications of increased competition to RGC and the 'effect on mineral sands prices if another group brought these deposits into quick production'.[16] As such, the framework for considering the factors influencing the business and the time frames for investments often diverged between RGC management and its largest shareholder.

More fundamentally, Hanson questioned the efficacy of the diversified business model. There were numerous requests to consider focusing the portfolio to one or two key businesses, which typically entailed, in Hanson's thinking, the retention of mineral sands and the Porgera operation in Papua New Guinea, although country and currency risk associated with the investment in Papua New Guinea was of ongoing concern to Hanson.

Alexander wrote to Max Roberts suggesting a more radical consideration in terms of the company's structure as a means of addressing the financial issues facing RGC:

> We particularly emphasised our great concern about Renison's [RGC's] level of gearing and the clear prospect, on the basis of the figures provided for the next three years, that this gearing is not going to be significantly reduced … We discussed with Campbell the serious strategic problems that the level of gearing has created and described to him our concern that with the level of borrowings created in recent years, coupled with the rapid downturn in the fortunes of the mineral sands business, Renison is now in a highly constricted situation without the ability to take on new opportunities as they arise. One way to solve this would be to dispose of one or other of the mainstream activities—either Porgera or mineral sands … We made it clear we would not support a Rights Issue … The name of the game at Renison for the next three years must be cash flow. The company has got itself into a box from which it will be difficult to emerge without hard decisions. Unless the gearing is rectified we see no potential for really worthwhile growth through the 1990's which must be essential for both the shareholders and for the job satisfaction of the management.[17]

16 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 26 October 1989, p. 16, RGCA, Box 11329, BRD38/04.

17 By Fax, AGL Alexander to M Roberts, 24 June 1991, RGCA, Box 5336, File 2-4.

A financial adviser was asked to assess the value of RGC's interest in Porgera and the mineral sands operations. In 1991, Cotton expressed his preference for the sale of the Porgera stake. The flotation of RGC's interest in Porgera was proposed with Anderson presenting a report detailing the complexities involved in preparing a prospectus for such an occurrence. Porgera was retained.[18]

Cotton took a more favourable view towards mineral sands, writing: 'On balance we would prefer to keep the mineral sands business as both price and demand are clearly at the bottom of the cycle. We are sure that this company has excellent long term market and growth prospects'.[19] A wider consideration of the RGC portfolio structure was undertaken. The board endorsed the planned divestment of the company's coal assets, including Glendell and Narama, as well as Tennant Trading and the agricultural assets of Colinas, while consideration was also given to the divestment of the Investment Division. Efforts to generate cash were associated with selling shares in all but one of the companies held within its Investment Division in 1991. Tennant Trading was sold in 1992.[20] Renison, a major part of the portfolio, was suffering from low tin prices and operating in accordance with a 'survival plan', while options for the closure of Mount Lyell were being considered.[21] A sale process for Mount Lyell failed to elicit interested parties willing to submit a bid. In October 1991 a share placement occurred of 10 per cent of RGC's issued share capital, raising $85 million. Hanson did not take up its entitlement in this share issue.[22] These actions, and others, enabled RGC to reduce its net debt from $442 million to $332 million and its net debt to equity ratio from 92 per cent to 60 per cent.

Hanson was never comfortable with its investment in RGC, an investment that was not consistent with its usual outright ownership arrangement and ability to scrutinise and control the level of capital expenditure. According to Cotton's later recollection, Hanson would not have expected

18 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 25 July 1991, p. 3, RGCA, Box 1130, BRD38/05.

19 Facsimile to Max Roberts, Renison, from AR Cotton, 24 July 1991, RGCA, Box 17848, RGC 28661.

20 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 28 March 1991, p. 15, RGCA, Box 1130, BRD38/05.

21 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 23 May 1991, RGCA, Box 1130, BRD38/05.

22 17.9 million shares were placed with institutional shareholders at $4.80 per share, a 5.5 per cent discount to the prevailing weighted average share price.

to maintain its shareholding in RGC for the length of time it did and, in his view, 'Hanson would have been receptive to offers that gave what was full value'.[23] In fact, Hanson over the years had several opportunities to sell some or all of its shareholding at prices between $4.20 and $9.50, while a potential sale arrangement with Sumitomo would have secured a price above $10.00.[24] 'One particular regular enquirer' was Norm Fussell, the chief executive officer of Mount Isa Mines, a company that held a shareholding in RGC and was seen as a potential acquirer of the company. He was viewed by RGC as 'running around the world approaching an embarrassing number of companies to try and put a deal together'.[25] No offer fulfilled the expectation of full value for Hanson's controlling position. Hanson considered approaching an advisory firm to evaluate the options it had available, including obtaining a new controlling shareholder or pursuing a reconstruction of the company. It also considered approaching the Foreign Investment Review Board to increase its shareholding beyond 44 per cent.

Through the influence of the independent directors, the RGC board saw little merit in restructuring the company into one or two main business streams as proposed by the Hanson directors. Collins described such a concept as 'alien to a diversified mining house'.[26] He advised his colleague in London:

> It was accepted that the Executive's endorsement of the strategy to remain as a diversified mining house was made on philosophical grounds rather than on the basis of a financial case. I suggested that, as proof of the strategy's soundness, a financial appraisal of a head office move to Perth and sell off operations other than AMC and Porgera should be prepared. It was felt that this was so far away from a strategy which the Board could contemplate that it would be a waste of time. Members remembered debating the disposal of mineral sands, which lost $5m in 1982 … RGC regards itself as having a diversified portfolio of cyclical mining interests, which require a long term approach.[27]

23 Tony Cotton, personal communication, 6 January 2017.

24 The Hon Michael Lee, Minister for Resources and Tourism, from MJ Roberts, Chairman RGC, 20 May 1993, National Archives of Australia, A9275 F1992/4302 Part 1.

25 RGC Briefing Note, 1 January 1991, RGCA, Box 17848, RGC 28662.

26 Christopher Collins to AGL Alexander, 11 March 1991, RGCA, Box 17848, RGC 28662.

27 To AGLA [AGL Alexander] from CDC [Christopher Collins], 1 March 1991, [re] RGC February Board Meeting, 28 February 1991, p. 4, RGCA, Box 17848, RGC 28662.

The decline in the group's financial performance resulted in a need for additional borrowing facilities, as well as to curtail expenditure. The sale of assets, requested by Hanson, and one of the few options available to generate additional funds, remained under active consideration. At the March 1991 board meeting, directors agreed that the company should attempt to sell its coal and iron ore interests, as well as Mount Lyell. Colinas remained earmarked for sale although with continued difficulty in attracting interested buyers. The sale of the investment portfolio, a part of the business that Hanson was adamant should be sold, was deferred. Collins also proposed the sale of 'peripheral assets' and exploration projects, such as Pine Creek and the Henty gold project.[28] Exploration expenditure was reduced from $19 million to $16 million as part of 1992 budget planning, although one of the Hanson directors sought a 50 per cent reduction and questioned whether the group's head office should be relocated from Sydney to Perth. Hanson directors were of the view that actions to address the level of debt, by deferring capital expenditure and reducing costs, were of paramount importance. Their view was that management efforts did not 'go anywhere deep enough' in the context of challenges associated with the equity position in Porgera and the reduction in RGC's credit rating in 1992.[29]

Notes on a board discussion of the financial outlook for the 1992 financial year recorded:

> The Chairman's request for Directors' views produced a unanimous comment from non-executives that the budget was unacceptable … there were inadequate solutions offered. CmcA [sic, Campbell McC Anderson] rejected the proposition that a 'survival plan', embracing radical change was needed and, commenting upon each material area of the business, gave reasons why it would be very difficult to implement change in the near term without damaging the Company. Directors made it clear that the status quo was not an option and asked that the Managing Director re-address: (1) Asset Sales; (2) Exploration and Development Budgets (3) Administration and Head office (structure and costs).[30]

28 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 24 January 1991, p. 15, RGCA, Box 1130, BRD38/05.

29 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 24 February 1991, p. 13, RGCA, Box 1130, BRD38/05; Christopher Collins to AGL Alexander, 11 March 1991, RGCA, Box 17848, RGC 28662.

30 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 18 June 1992, p. 4, RGCA, Box 1130, BRD38/05. The board note also indicated: 'At the Chairman's Committee, read out correspondence and confirmed FMB [Mark Bethwaite] had been told he would become CEO next year'.

It was determined there was a need for ' "radical action" … to ensure the Company's continuity'.[31] At a 1993 board meeting, Chiese commented that Hanson saw the mineral sands operations as the group's 'biggest problem area'.[32] In his view, 'with approximately 800 employees there did not seem to be a single person responsible for the Division'.[33] In the context of financial challenges and the evident anxiety of the Hanson-appointed directors, Anderson cautioned directors to be careful about 'kneejerk responses to a downturn in the cycle' and to avoid what was referred to as 'precipitative short-term action which may jeopardise the long-term future'.[34]

Mineral sands—competition and cyclicality

In 1991, Anderson stated that the mineral sands market was the worst it had been for seven to eight years.[35] The lack of demand for mineral sands products in the early 1990s was followed by a precipitous decline in the zircon price. Even though it was believed to have a floor price of $450 per tonne, it dropped as low as $125 per tonne in early 1992 and was to decline further. Richards Bay Minerals, which became the global leader in titanium slag production, created a competitive threat not only for high-grade titanium dioxide products, but also zircon. The zircon price came under pressure in part due to the approach of Richards Bay Minerals in considering zircon a minor part of its overall revenue stream and, as such, a by-product to its main sources of production. In a situation in which any revenue contribution from zircon could be viewed as an offset to the cost of production of its principal products, this created a pricing dynamic that was not beneficial for RGC, given zircon was a more meaningful part of its revenue profile.

A contemporary participant conveyed that the demand for zircon in the 1980s meant that 'the envelope was pushed to get volume at the expense of quality'. In this regard:

31 ibid., pp. 4 and 8.

32 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 24 June 1993, p. 3, RGCA, Box 1130, BRD38/05.

33 ibid.

34 ibid.

35 *The Australian*, 26 July 1991.

> Specifications that were termed as 'typical' were stretched to 'maximum' and on occasions beyond. At the end of the 80s and beginning of the 90s, zircon in particular was in huge demand and some of our biggest and best customers were force fed out of spec material in order to push volume through. When the market started to turn around in … 1991, those customers pushed back and not only refused to buy more, they were demanding rebates on the off grade material they had been given. Producing the volumes of zircon that RGC was producing at that time, it took but a few months of no sales to build up an immense working capital and no constraint on production was initiated.[36]

Higher zircon prices, influenced by an earlier surge in demand in refractory usage in Japan, had caused customers in the steel industry to seek substitutes or reduce the amount of zircon used, with partial substitution in refractory and foundry sands applications. A similar situation became evident for zircon use in tile applications. While the prospects for chloride feedstock demand were more favourable due to the continued growth of chloride pigment production capacity, the nexus between feedstock demand and global economic growth remained influential. As such, in 1991 an 'unexpected sharp decline in the market volumes for titaniferous dioxide feedstock and in market volumes and prices for zircon as a result of world recession and capacity increases' changed the landscape yet again.[37]

In a memorandum to Anderson in August 1991, Mark Bethwaite, as deputy managing director, wrote: '[The] current AMC structure is more appropriate to the strong growth phase of recent years than the operational and expenditure restraint required by current poor mineral sands markets'.[38] The costs in the Perth office were excessive, with too many levels of management and overlap with functions performed in the Sydney office. The challenges associated with Eneabba and synthetic rutile expansion work had caused the numbers in the office to swell. The Perth office was closed and replaced by a smaller divisional office at Geraldton. In a communication to employees, Bethwaite observed: 'I am aware that these changes will not be welcomed by some staff … The mineral sands industry is under extreme pressure and RGC Mineral Sands must meet this challenge'.[39]

36 Bryan Ellis, personal communication, 20 April 2017.

37 Renison Goldfields Consolidated Limited, *Annual Report 1991*, p. 1.

38 To C McC Anderson from Mark Bethwaite, RGC Restructuring and Overhead, 19 August 1991, RGCA, Box 1130, BRD38/05.

39 RGC Mineral Sands Limited Announcement, 15 June 1992. On 30 April 1992, AMC changed its name to RGC Mineral Sands.

In 1992 a task force was formed, chaired by Bethwaite, to examine the future of the mineral sands division. Influenced by the marketing actions of Richards Bay Minerals, RGC was required to be 'an aggressive seller [of zircon] … and prepared to match prices'. The consequence was that zircon prices fell during the year from an already low price of $190 per tonne to $120 per tonne, with the price not appearing to 'have reached its floor'.[40] The task force presented its interim findings in July 1992. These included that RGC should remain in mineral sands, focus on high-grade titanium dioxide feedstocks by retaining existing assets and not invest downstream. A focus on competitiveness was called for, while it was also identified that the issue of high radioactivity in Eneabba ilmenite needed to be addressed.

The Eneabba North mine closed for 12 months, while commissioning of Eneabba West was accelerated, and one synthetic rutile kiln was idled. Development of the Eneabba West deposit began in 1991 on tenements previously owned mainly by Allied Eneabba. Expenditure originally estimated at $55 million subsequently increased to $115 million when ore reserves increased from 143 million to 227 million tonnes. With this, the scope of the project increased to enable higher production of rutile, zircon and ilmenite. The dredge for the operation was constructed in the Netherlands, employing the world's largest underwater bucket-wheel with a floating processing plant. Final expenditure exceeded $135 million.

The operation was plagued by commissioning problems. Harder than expected mining conditions caused high wear rates on equipment, such as the bucket-wheel of the dredge, pumps, and pipelines between the dredge and concentrator. Lower ore grades and lower than expected recoveries, combined with the low level of equipment availability, added to operational and financial challenges. Commissioning issues continued throughout 1991 prior to the dredging operation being shut down to effect necessary equipment modifications. The Eneabba North mine reopened in March 1992 and Eneabba South was shut down. Both processing plants serving the operation were idled for part of 1991. Meanwhile, commissioning of synthetic rutile kiln D was completed by August 1991. The Green Cove Springs operation in Florida continued to operate with continued demand for its products. A definitive feasibility study had commenced following the discovery of the Old Hickory deposit in Virginia, United States, although this was suspended in light of market conditions.

40 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 26 March 1992, p. 9, RGCA, Box 1130, BRD38/05.

Overall RGC earnings in 1991 were $29 million. Losses were recorded for the next two years before a small profit and subsequent partial recovery (see Table 19.2). In this context, one of the Hanson-appointed directors queried whether the AMC investment was 'too big a part of the Company and making the Company vulnerable to fluctuations in mineral sands price changes'.[41] The concerns with mineral sands were part of wider portfolio issues, with a report prepared in 1991 on the company's capital expenditure profile, cash flow and potential for the sale of 'peripheral assets'.[42] Mineral sands market conditions remained poor, in terms of price and demand, during 1992, although conditions stabilised by 1993, with production increasing and the mineral sands division generating a small profit.

Table 2. Mineral sands performance, 1990–1994.

	1990	1991	1992	1993	1994
Sales revenue ($m)	356.7	236.3	173.4	201.9	208.3
Contribution to group profit ($m)	176.6	67.2	–1.0	1.3	–5.5
Share of group assets ($m)	369.3	514.4	502.2	469.0	445.4
Capital expenditure ($m)	151.8	163.8	17.0	8.3	12.3
Production (tonnes)					
Rutile	113,271	95,002	58,209	81,453	93,492
Synthetic rutile	166,739	123,150	169,041	203,466	161,190
Zircon	310,552	162,607	95,433	190,107	254,093
Ilmenite	740,206	470,457	568,155	722,441	635,970
Sales (tonnes)					
Rutile	106,897	87,896	59,319	87,584	89,670
Synthetic rutile	179,475	118,895	150,855	201,205	171,175
Zircon	263,403	167,293	151,757	188,801	254,771
Ilmenite	389,842	306,201	275,689	277,310	310,505

See Appendix 5 for more detailed information.

Sources: RGC annual reports, 1991 to 1997; 'Information Memorandum in Relation to a Recommended Merger by Scheme of Arrangement between RGC Limited and Westralian Sands Limited', 1998.

After being idled, Eneabba West recommenced in May 1993, following major modifications to the dredge. In the meantime, RGC had over $200 million worth of mineral sands assets that had been idled and

41 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 25 January 1991, p. 15, RGCA, Box 1130, BRD38/05.
42 ibid.

not generating a return.[43] The Eneabba South dredge, concentrator and processing plant, which had not been in operation since early 1992, were decommissioned and the balance sheet carrying values written-down.

In 1994, an internal strategic planning group reviewed future challenges and opportunities for the mineral sands business. The major threats to the business were identified, including the continuation of synthetic rutile production associated with the availability of suitable ilmenite feed—in part related to the 'economic viability of Eneabba West' and the 'sharp reduction' in zircon from Eneabba. The means to address these challenges included investigating the acquisition of an Indian rare earth company in Kerala as a potential source of ilmenite for the kilns at Narngulu. Furthermore, the Old Hickory deposit in Virginia was considered as a smaller-scale, high-grade deposit to offset the expected decline in the high-grade zircon strands in Eneabba.[44]

By 1995, the production output of the mineral sands division exceeded 1 million tonnes for the first time in five years. After three years of poor performance, profitability improved although it was well below the profit levels of the late 1980s. An RGC board paper observed a more optimistic future for mineral sands: 'We have every reason to face the future with confidence'.[45] Increased United States pigment production and high pigment plant utilisation rates were associated with synchronised world economic growth. Synthetic rutile production was running at full capacity and RGC was able to structure contractual arrangements in Australian dollars, eliminating some of the foreign exchange rate risk. Cessation of the Sierra Rutile mining operations in January 1995 also contributed to market tightness for high-grade feedstocks, while a seven-week strike at Richards Bay Minerals in South Africa added to the disruption to market supply. Titanium dioxide prices increased and new contracts, including a 10-year agreement with pigment customer SCM, were put in place. Revenue from zircon represented over a third of revenues for the mineral sands division of RGC and the company advised in its 1996 annual report that it had the capacity to produce 55 per cent of the world's rutile, 30 per cent of its synthetic rutile and 36 per cent of its zircon.

43 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 25 February 1993, p. 4, RGCA, Box 1130, BRD38/05.
44 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 23 April 1992, p. 19, RGCA, Box 1130, BRD38/05.
45 Renison Goldfields Consolidated Limited, Board Papers, Mineral Sands Market Update, January 1995, RGCA, Box 13609, R40-36G-024.

Renison's challenges

In 1990, tin prices were their lowest in real terms for 30 years. The cost of production was $8,700 compared to the prevailing tin price of around $8,000. Mike Ayre, the general manager of Renison, assembled a team to look at further options for the operation and to improve financial performance (see Table 19.3). His work in this regard was undertaken in conjunction with CD (Colin) Patterson, the mine superintendent and later general manager. Given that there had been two exercises to reduce the size of the workforce it was viewed that the opportunities for 'marginal' improvement had been exhausted and more far-reaching changes were necessary to attempt to put the mine on an even financial keel.[46] The RGC board was appraised of the details of the operating strategy for Renison in January 1991, designed to reduce operating costs to $6,000 per tonne. A comprehensive plan was formulated, the main elements of which were a reduction in employee numbers from 340 to 250; changes to operating conditions and terms of employment, including a planned reduction of employee pay by approximately 20 per cent; reconfiguration of the milling operation; and a ban on overtime.[47] It was expected that these proposals would generate industrial disruption and a two-month stoppage was envisaged as a consequence of progressing with them despite the workforce being 'fully appraised of the parlous state of the mine operation and the significant losses being incurred'.[48] Patterson had engaged with the workers on site and was confident, along with other management, that the company's proposals would be accepted. At the mine site on 27 February 1991, the survival plan proposal was put to a vote of the workforce.[49] From an RGC board perspective, the management of both Renison and Mount Lyell were on notice. In the words of Bethwaite, 'they must achieve their targets or the mines would close'.[50]

46 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 25 October 1990, p. 11 and 26 November 1990, p. 4, RGCA, Box 1130, BRD38/05.
47 The plan was for a five-day mill operation over 234 days and planned annual tin production of 5,500 tonnes (Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 17 January 1991, pp. 22–23, RGCA, Box 1130, BRD38/05).
48 ibid., p. 23.
49 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 24 January 1991, p. 22, RGCA, Box 1130, BRD38/05.
50 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 23 June 1991, p. 3, RGCA, Box 1130, BRD38/05.

Table 3. Renison performance, 1990–1997.

	1990	1991	1992	1993	1994	1995	1996	1997
Sales of tin metal ($m)	66.5	46.8	36.9	62.3	48.3	55.3	65.6	65.1
Contribution to group profit ($m)	1.2	–12.7	–1.7	1.9	–2.7	–6.0	–0.9	–8.6
Share of group assets ($m)	45.4	33.0	32.1	28.6	31.5	44.2	69.9	41.5
Return on assets (%)	2.6	–38.5	–5.3	6.6	–8.6	–13.6	–1.3	–20.7
Capital expenditure ($m)	6.6	5.9	2.5	5.4	7.0	14.9	30.6	11.3
Production								
Ore treated ('000 tonnes)	742	548	534	565	624	650	706	692
Grade (% tin)	1.34	1.23	1.41	1.5	1.5	1.4	1.6	1.7
Tin sales (tonnes)	7,001	6,217	5,114	7,407	6,842	7,164	7,953	8,165
Recovery (%)	78.5	76.2	79.6	80.1	82	78	76	73
Average tin price ($/tonne)	9,269	7,355	7,178	8,414	7,055	7,712	8,273	7,422

See Appendix 6 for more detailed information.

Sources: RGC annual reports, 1991 to 1997; 'Information Memorandum in Relation to a Recommended Merger by Scheme of Arrangement between RGC Limited and Westralian Sands Limited', 1998.

Despite the expected agreement of workers and the Trades and Labor Council to the company's proposal, the mass meeting of workers at site failed to support the company's restructuring proposals. Joe Pringle, an entrenched union figure and representative of the underground workers, directed his members to vote against the proposal. The vote was lost. Bethwaite had travelled to the site for the vote. He spoke with Pringle and said that he would be leaving by car in 20 minutes and unless Pringle changed his view, the mine would be closed. Bethwaite drove off with no change in Pringle's stance.[51] It was a bitter disappointment to Bethwaite, who had been impressed with the attitudes of the union representatives he had met on site earlier in February. In a note to Ayre, who decided it would be best for him to leave Renison at this time and hand over to Patterson, Bethwaite observed that 'the outcome of the mass meeting demonstrates that neither the specific changes nor the attitudes to allow

51 Mike Ayre, personal communication, 21 October 2018.

Renison to survive have yet been achieved'.[52] He authorised that the mine be closed and if necessary placed on a care and maintenance basis for up to six months, after which permanent closure would occur.

On 6 March 1991 the workforce was locked out. Patterson received a telephone call from the premier of Tasmania, Mike Field, asking him to attend a meeting in Hobart. At the meeting were representatives of the Trades and Labor Council and other peak unions in Tasmania. After a day-long meeting, the unionists present agreed that support be provided for the company's 27-point plan. Patterson convened a meeting of the reassembled workforce. Pringle was invited onto the dais, shook Patterson's hand and joked that he was being fired. The meeting of workers provided unqualified support for the Renison survival plan, including agreement to a program of voluntary redundancies, with 207 employees electing to accept redundancy arrangements.

Later that month, the company advised that management was working 'towards a viable operating strategy' with a workforce of 250 and employees having accepted, on average, a 23 per cent reduction in earnings with eligibility to participate in a profit-sharing scheme. Accordingly, the board agreed to reopen the operation, which occurred on 2 April 1991.[53] A day later, the underground mining employees were stood down following a decision by the Australian Workers' Union not to supply supervision for mining operations, despite previous written undertakings to do so. This was yet another impediment to the smooth operation of Renison.

At the same time that major operational and organisational change was occurring, expenditure was committed to the identification of potential ore reserves at deeper horizons. What was referred to as the 'Rendeep project' commenced. In the context of reduced reserves and the uneconomic nature of current mining operations, the identification of additional reserves was imperative as a means of extending production at Renison. Rendeep mineralisation had been recognised for some years, with sporadic drilling having occurred to depths of 600–1,200 metres over a length of 2.5 kilometres by 600 metres. The drilling, however, involved a relatively small number of drill holes at wide spacings. Using geostatistical techniques, an estimate of inferred resources was made. However, further

52 To MWD Ayre from Mark Bethwaite, 1 March 1991, National Archives of Australia, Tasmania (NAAT), NS3988/1/125.

53 RGC Announcement to the Australian Stock Exchange and the Press, Renison Tin Division, 28 March 1991 (copy held by the author).

exploration drilling was necessary to delineate the mineralisation with sufficient confidence to enable a feasibility study to proceed. Having defined an area of likely mineralisation, drilling occurred from the surface during 1989 and 1992. The drilling was expensive and was undertaken while Renison was generating inadequate returns or losses. The last hole drilled as part of the program encountered an intersection of 40 metres of ore at a grade of 11 per cent tin, in what was referred to as the Blackwood ore body. It became evident there was a significant resource. However, further delineation was required to support the technical data needed for a feasibility study. The North Basset drive was established from the North Basset rise ventilation shaft and used to extend the exploration drilling, enabling the delineation to be completed. By 1994 development work had begun with the aim of accessing an ore reserve of 3.3 million tonnes at a tin grade of 1.96 per cent.[54]

Richard (Dick) Scallan, who had previously run the Eneabba operation in Western Australia, commenced at Renison in 1991 as general manager. He too encountered a militant industrial relations climate, with many of the workers tough and combative. Pringle, who had been a thorn in the side of previous management, had left but still had ongoing influence with the workforce, directing activities from his backyard shed in Zeehan. When Scallan arrived he realised he had to break this situation of mistrust and animosity. Furthermore, he viewed the work environment as terrible, with a high level of work accidents. He adopted symbolic but important changes, such as changing into protective clothing in the same area as the workforce, rather than a separate management change area. He erased the lines in the staff carpark that separated the cars of management from those of the general workforce and emphasised personal safety by insisting that protective clothing, gloves, eye goggles and hearing devices be worn.[55] He also instituted an extensive cultural change program.

In October 1993, the RGC board considered the feasibility study for the development of the Rendeep deposit. Rendeep was believed to have the potential to extend mining operations by 10 to 20 years. Recoveries were expected to be as high as 84 per cent, the level being reported from the existing Renison mining operations. By June 1994, it was resolved by the board that $34 million be committed for the Renison shaft project to

54 Colin Cannard, personal communication, 25 September 2018.
55 Dick Scallan, personal communication, 18 May 2018.

access the higher-grade ore in Rendeep.[56] It became clear after production began that estimates of recovery of tin from ore mined had been overly ambitious and were not achieved, undermining the basis for the project and the longevity of Renison in the portfolio.

Mount Lyell—steps to closure

In June 1989, Keith Faulkner commenced as general manager of Mount Lyell Copper Division. In February 1990 a strategic planning team was formed to examine future options in relation to the Mount Lyell operation, designed to improve financial outcomes and provide a plan for the mine's continuation. Under legislative arrangements with the Tasmanian Government, RGC had undertaken to surrender the leases on completion of the 60 series ore body. Faulkner was of the view that copper production could still continue beyond this with the resource 'still the largest, and second most valuable (in terms of "in ground" value) in Tasmania'.[57] An external consultant was retained. The exercise was conducted in the context of a year-to-date loss of Mount Lyell of $4.6 million, compared with an expected budgetary outcome of $12.3 million. By June of that year, the loss had grown to $11 million, compared to the budgeted expectation of a $20.9 million profit. Of the $31.9 million variance, $29 million related to lower prices and $2.1 million to lower volume outcomes.[58]

The loss for Mount Lyell was in the context of a substantial loss for Renison and although AMC was profitable, it was $41 million below its expected budgetary outcome. Bethwaite highlighted the challenge of the financial performance of Mount Lyell entering the 1991 financial year. In an internal memorandum he wrote that the budget estimates for the group were 'critically vulnerable to downturn in the copper price' and that 'it is critical that Mount Lyell contribute positively to an overall Group result which is bearing the full effects of the current recession'[59] (see Chart 8).

56 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 23 October 1993, RGCA, Box 1130, BRD38/05; Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 2 June 1994, RGCA, Box 14284, BRD38/08.

57 Memorandum to Mark Bethwaite from Keith Faulkner, Strategic Planning, 3 December 1990, NAAT, NS1711/1/782.

58 Renison Goldfields Consolidated Limited, Board Papers, Mount Lyell Copper Division, March 1990, and Board Papers, July 1990, NAAT, NS3924, Items 459–469.

59 Renison Goldfields Consolidated, Memorandum, 5 April 1991, RGCA, Box 2978.

On 14 June 1991, the gravity of the mine's situation was communicated to the Mount Lyell workforce. A notice entitled 'Our Situation is Critical' was given to the workforce, stating 'we have failed to meet the targets necessary for us to survive in the world copper market … [and] We are not competitive!'[60]

On 25 June 1991, Faulkner issued a further general notice, entitled 'Three Month Survival Plan. Seven Day Operation'. This communication indicated that the operation had three months to demonstrate it could meet its cost and production targets in the context of a lower copper price and with the mine's operation moving from a five-day to a seven-day operation. The blunt warning Faulkner delivered to the workforce included: 'If we cannot do that we do not have a viable mining operation'.[61] The Mount Lyell workforce demonstrated its commitment to do what it could to help the operation continue and, among other measures, the usual notice period to change working arrangements was dispensed with and the operation moved to a 40-hour week. According to Faulkner, the workforce understood that the mine could still be profitable and its response to the challenge was 'enthusiastic and gratifying'.[62] The challenge posed was met. The company issued a stock exchange release on 26 September advising that the three-month trial had been successful in improving productivity and unit costs. The mine also made the transition from production from the 50 series to the 60 series ore bodies.

Faulkner had commissioned another internal report to identify and evaluate alternative means of operation. However, despite this work and the temporary reprieve, the decision had been taken at a corporate level that Mount Lyell would not continue beyond the mining of the 60 series stopes. The 'mine's invidious cost and competitive position' precluded delineation drilling below the 60 series stopes.[63] In anticipation

60 General Notice, Our Situation is Critical, 14 June 1991, NAAT, NS3357/1/138.

61 General Notice, Three Month Survival Plan, Seven Day Operation, 25 June 1991, NAAT, NS3357/1/138.

62 Renison Goldfields Consolidated Limited, Mount Lyell Copper Division, Operating Committee Report, July 1991, NAAT, NS3924, Items 483–495.

63 Email from Mark Bethwaite to KE Faulkner, 7 August 1990, NAAT, NS3357/1/138. This email also directed the cessation of exploration below the 60 series, with approval to recommence to be based on evidence of sustained performance in the 1991 financial year. It was also requested that discussions commence with the Tasmanian Government in relation to early closure. The report prepared for Faulkner and delivered about the same time as Bethwaite's email offered no clear alternatives for the operation of the mine, short of fundamental changes to the mining techniques and structure of the workforce, in themselves impracticable given the established labour and employment arrangements (Operational Alternatives for Mount Lyell Copper Division, 20 August 1991, NAAT, NS 3357/1/138).

of a potential sale or closure, in November 1990 a reorganisation had been undertaken that involved dismantling the 1983 Mount Lyell and Renison interrelationship. The change, for accounting and taxation purposes, was designed to place Mount Lyell 'in an optimal state for sale or liquidation'.[64] An external adviser was appointed to prepare sales documents for Mount Lyell. A detailed evaluation was undertaken in 1991 including a consideration of which mining companies could be approached that may have an interest in evaluating and acquiring the operation. It was recognised there were constraints to this approach being successful: the mine had been marginal for many years due to its low grade and had been severely capital constrained. Cyprus Minerals considered the acquisition of Mount Lyell but by the end of 1991 it indicated that it was no longer interested.[65]

In July 1992, the general manager informed the workforce, through a series of meetings at site, that there were no plans to mine the 70 series or any other ore source on the leases held by the company. By 1993 a decision had been made that Mount Lyell would close at the end of 1994 and, on 24 March 1994, a public announcement was made of the scheduled closure on 15 December. Mine production ceased on 8 December 1994 with 171 employees retrenched during the following week. Mount Lyell exhibited a strong operational and financial performance in its last year. Profit and operational cash flow exceeded the budget. Grade, recovery and ore treatment were all favourable and safety performance met expectations. This was a commendable outcome, given this was the final period of operation and employment for most of the workforce, many of whom had been associated with Queenstown and the mine for most of their working lives.

64 Renison Goldfields Consolidated, Memorandum, Mount Lyell/Renison Re-organisation, 29 November 1991, RGCA, Box 297807.

65 Memorandum, Cyprus Minerals—Mt Lyell, 19 December 1991, RGCA, Box 3536.

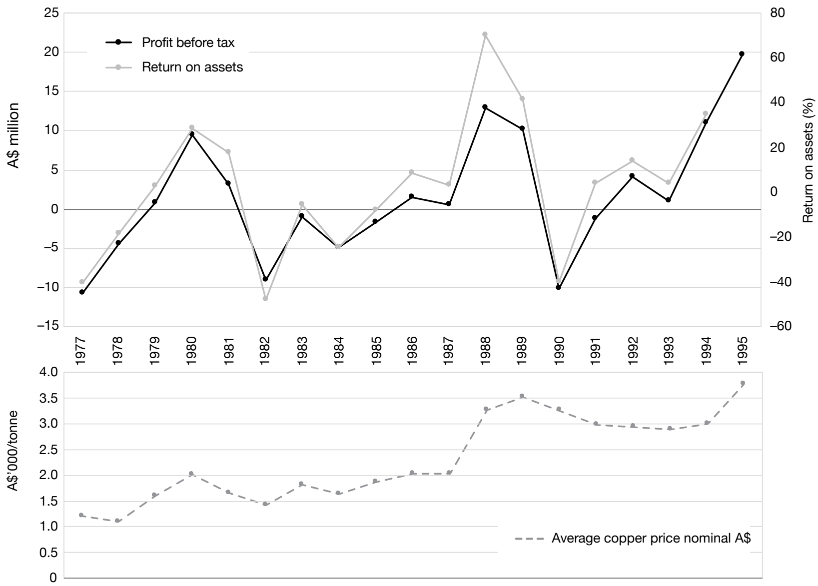

Chart 8. Mount Lyell contribution to Consolidated Gold Fields Australia and Renison Goldfields Consolidated group results, 1977–1995.

This chart shows the historical performance of Mount Lyell from 1977 to its closure at the end of 1994. Mount Lyell displayed a poor earnings profile throughout the period shown with only brief periods of profitability, including the final two years of operation. Annual average return on assets was 2.6 per cent or, excluding the 1994 financial year when assets had been written-down, 0.6 per cent. See Appendix 4 and Appendix 7 for more information.

Sources: RGC annual reports, 1991 to 1997; 'Information Memorandum in Relation to a Recommended Merger by Scheme of Arrangement between RGC Limited and Westralian Sands Limited', 1998.

The Tasmanian Government announced that it had awarded the Mount Lyell leases to Gold Mines of Tasmania, effective 31 December 1994. Mount Lyell, one of Australia's oldest and most historic mining operations and one of Consolidated Gold Fields Australia's key initial investments in establishing in Australia, closed after 101 years of operation. An '"End of Era" Lights Out Ceremony and Community Barbeque' was held on Saturday 17 December at Queenstown attended by the workforce, their families and members of the Queenstown community.[66]

66 Renison Goldfields Consolidated Limited, Board Report, Mount Lyell Copper Division, December 1994, NAAT, NS3924, Items 522–532.

Gold and other interests

The RGC portfolio experienced other changes in the first half of the 1990s. The Lucky Draw gold mine, discovered in 1985 and so-named as a result of a ballot draw to award the lease as pegged by two companies on the same day, commenced production in 1988. It performed well and made an impressive, if short, financial contribution, closing in July 1991.

RGC held an interest in the Pine Creek gold deposit, 225 kilometres south-east of Darwin. The mine began production in October 1985 and continued for nine years to the end of 1994. RGC held an initial 49 per cent interest that increased to 100 per cent when its partner, Enterprise Gold Mines, defaulted on its financial commitments in 1991. Mining took place within the Enterprise open cut deposits, followed by mining at a series of satellite deposits, including Czarina, Gandy's Hill, North Gandy's Hill and International, with the latter three deposits acquired during the course of the mining operation. Initial mining progressed well with a doubling of throughput and expansion of milling capacity. By 1993, grades at the Enterprise pit were declining, with mining exhausted earlier than scheduled. Access to the subsequent, smaller deposits with lower grade and lower throughputs; the need to relocate roads, including the Stuart Highway; acquisition costs of landholdings; and expenditure being depreciated over a shorter period adversely affected profitability after two strong initial years.

The Nelesbitan gold mine was viewed as a means of testing RGC's entry into gold mining in the Philippines. The operation was spectacularly unsuccessful. After commencing in May 1990, the operation was suspended six months later in October 1990 due to technical problems and an outlook of 'questionable profitability', as well as a deteriorating security situation in the area where the mine operated.[67] The Wau gold mining operations in Papua New Guinea, acquired as part of the purchase of New Guinea Goldfields in 1981, encountered varying ore grades and ceased operation in September 1990.

67 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 23 August 1990, p. 7, RGCA, Box 11329, BRD38/04.

RGC had undertaken exploration between Rosebery, the site of Mount Lyell and near Renison in Tasmania. As the fault zone encountered had pyrite and low incidences of gold, the decision had been made to relinquish the ground. Before doing so, Roger Shakesby conducted a review, utilising one of RGC's most experienced geologists, Lindsey Newnham, as well as an international consultant. None of the drill cores had been assayed for gold, only copper. Re-assaying showed high grades of gold over varying widths. This proved to be the birth of the Henty gold project.[68] Further drilling confirmed the discovery of what was referred to as zone 96, a highly mineralised section 350 metres to 500 metres below the surface.

The Henty project progressed to a feasibility study. Approval was granted for project development in 1992, with capital expenditure of $53 million authorised. Given the inability of the joint venture partner, Little River Goldfields, to finance its share of the expenditure, RGC moved to a 100 per cent holding. This process delayed the commitment of the project but also enabled a re-evaluation of the development approach, with a decision to develop horizontally from two levels instead of one. Prior to production commencing, an RGC geologist had identified geological alteration 2 kilometres away from the Henty ore zones to be accessed by the planned development. Drilling to the zone encountered gold-bearing ore. This potential was not exploited by RGC directly but by Goldfields Limited, in which RGC had a 55.8 per cent interest from 1996. With Goldfields acquired by Delta Gold and in turn this combined entity acquired by Placer, the full potential of Henty, a significant gold discovery, was realised by other companies.

Similar to the Narama coal operation, the Koba Tin operation in Indonesia provided a valuable new production and revenue source to the group during the first half of the 1990s, although not sufficiently material to offset the decline in some of the previous mainstays of the portfolio. Additional reserves were identified and a second dredge was acquired to develop the Bemban area of the operation. Koba Tin would be one of the few non-mineral sands assets retained after RGC and Westralian Sands merged in 1998.

Progress on the development of the Glendell coal deposits in the Hunter Valley in New South Wales remained laboriously slow and, as such, stymied the basis for RGC's re-entry into the export coal market. Despite development approval having been granted in May 1983, issues relating

68 Roger Shakesby, personal communication, 9 December 2018.

to the foreign ownership status of its partner, Dalgety, continued to impede progress. RGC eventually sold its interest in 1992 after a decade of effort. A joint venture with Costain, also in the Hunter Valley, led to a successful tender to supply steaming coal to a power generation facility in New South Wales. The Narama coal project commenced production in January 1993 and contributed modest profits to RGC.

RGC retained a payment entitlement associated with Area C of the Pilbara iron ore deposits in Western Australia. The entitlement flowed from earlier changes in Consolidated Gold Fields Australia's ownership of its Mount Goldsworthy iron ore interests when, under a 1977 agreement, both RGC and Cyprus were entitled to a one-off payment of $19.8 million on the commencement of production from Mining Area C. RGC believed that an alteration to the financial arrangements might serve to expedite the development of the resource.[69] George Lloyd, RGC's exploration and development group general manager, had responsibility for generating an immediate payment for this future entitlement. Negotiations were conducted with BHP on the basis of substituting the payment when production commenced with a smaller up-front payment and royalty. In lieu of a future payment, a payment of $2.5 million to RGC and a future in-perpetuity royalty entitlement to be paid when production began and exceeded 5 million tonnes, were negotiated. During RGC's existence, Mining Area C did not contribute financially in terms of royalty payments. In the merger documentation with Westralian Sands issued in 1998, Mining Area C warranted scant attention, with an estimated value of $10 million to $14 million ascribed in the independent expert's report.[70] As such, the royalty entitlement that flowed to Westralian Sands and then Iluka was a 'sleeper' in terms of its future valuation and cash flow.

Porgera ownership challenges

The proposed development approach for the Porgera gold mine in Papua New Guinea had been submitted to the Government of Papua New Guinea in November 1988. Phase one of the project was commissioned in September 1990 and the mine was officially opened on 20 October 1990. The project advanced through various stages, with the pressure oxidisation

69 Renison Goldfields Consolidated Limited, 'Minutes of Meeting of Directors', 3 February, 1994, p. 9, RGCA, Box 14284, BRD38/08.

70 Information Memorandum in Relation to a Recommended Merger by Scheme of Arrangement between RGC Limited and Westralian Sands Limited, 1998, pp. 179–180 (copy held by the author).

circuit, involving three autoclaves, commissioned in September 1991 to be followed by the expansion of concentrator capacity and following stages that included the installation of a fourth autoclave. Porgera's financial contribution to RGC was pivotal, constituting the main earnings stream in the early 1990s.

In 1992, the president of Placer Dome, a shareholder in Placer Pacific and one of the three joint venture participants in Porgera, received correspondence from a Papua New Guinea Government minister. The correspondence contended that, in light of revenues and the value of production doubling from the original feasibility studies, the government had been misled about the size of the deposit and the potential production profile. The government was now seeking a 30 per cent interest. The contention led to uncertainty about the ownership structure of the joint venture and caused the companies in the joint venture to issue an Australian stock exchange release on 12 November 1992. The release stated that, based on correspondence from John Kaputin, the minister for foreign affairs, the joint venture participants were 'continuing to seek clarification of the Government's position including the question of other options being considered [by the Government]'.[71] Prime Minister Paias Wingti became involved, claiming that the joint venture, at the time of the 1989 negotiations, had made 'outrageous claims' not supported by subsequent events. Placer, Mount Isa Mines and RGC explained both publicly and in direct engagement with government officials and ministers that when the Papua New Guinean Government equity of 10 per cent was exercised in 1989 there was no legislation to support the current claim for 30 per cent government participation ownership, with exploration conducted after 1989 leading to the discovery of a high-grade zone, while metallurgical test work had improved the project's financial returns. The joint venture participants refuted any claims that they had misled the government.

The contention about the level of government ownership, and an often strained behind the scenes engagement with government officials, was taking place when RGC had a $250 million syndicated loan with a Bank of Papua New Guinea guarantee. Given increased concerns regarding Papua New Guinea's credit exposure and the uncertainty about the ownership structure of the Porgera project, the international banks

71 Draft Australian Stock Exchange Release, Placer Pacific, 12 November 1992, RGCA, Box 1091.

involved in the loan would not agree to proceed with loan extensions and restructuring. RGC was placed on a negative credit watch in November 1992.

Anderson played a prominent role in the joint venture engagement with the Papua New Guinea Government. He believed that Papua New Guinea's desire to increase its equity in the project was based on two fundamental misunderstandings: that in 1989 the Papua New Guinea Government had the right to acquire equity greater than 10 per cent and that the Porgera joint venture deliberately understated the potential of the Porgera project. Accordingly, he did not wish to see RGC's interest reduced and 'resolutely opposed' the allegations of misleading conduct. His view was that, if the government wished to pursue its own political imperative to increase its equity in the project, the joint venture participants should cooperate and insist that an independent market valuation form the basis of any such negotiations.[72]

It was proposed to the government that it appoint an independent consulting firm to report on their matters of concern. In turn, the joint venture participants made representations to Australian Government ministers, including the Foreign Affairs minister, to seek to persuade the Government of Papua New Guinea to moderate its claims against the companies. A concern, whether well founded or not, was that an intermediary may be offering funds to the Government of Papua New Guinea for increased equity in Porgera, the reopening of the Bougainville mine and the potential refinancing of the government's 22.5 per cent interest in the Kutubu oil project.

In January 1993, the government detailed its concerns about its equity in the Porgera project in writing to the joint venture. These concerns related to the provision by the joint venture of ore reserve and resource information, the increase in gold production, an increase in indirect costs and the financial performance of the Porgera joint venture, relative to the government's initial expectations. In the same month, Julius Chan, the minister for finance and planning, announced a major review of the country's fiscal regime for mining, petroleum and gas. For the Porgera joint venture participants, this raised the question as to whether any legislative or fiscal changes would also relate to the equity position of Porgera. The concern within the joint venture was of 'double jeopardy'

72 File Note, Tuesday 1 December 1992, RGCA, Box 1091.

in the form of possible reduced equity in Porgera and higher taxes on the project. Implicit, or at least in the view of the joint venture, was a veiled threat that expropriation legislation may be introduced into the Papua New Guinea Parliament to achieve the government's desired outcome.

While the Papua New Guinea Government had insisted on an additional 20 per cent equity in the Porgera project, agreement was reached in March 1993 for an additional 15 per cent government equity, providing it and the other participants each with a 25 per cent holding. While there was concern about the commercial terms of the offer, there was also a view that the offer may be presented by the government on a 'take it or leave it' basis, with the alternative to accepting the arrangement further negotiation or unilateral government legislative action. Such an outcome was not viewed favourably by the three participating companies for the future of the project. On 13 March 1993, a heads of agreement was signed. Despite the uncertainty and change in equity holding, Porgera represented the most important new asset for RGC and partially compensated for the lower financial contributions from the previous stalwarts of the portfolio—Renison and, to a lesser extent, Mount Lyell.

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