The Development of Bauxite at Gove, 1955–1975

By DAVID LEE
Deakin University

In the early 1950s Australia mined little bauxite and produced no alumina, that being the chemically pure aluminium oxide which is extracted from bauxite and then smelted in electric furnaces to produce aluminium metal. The huge costs of aluminium production meant that, after World War II, six large companies dominated the aluminium industry worldwide, from mining bauxite through to fabricating and selling metal. These were Alcoa, Reynolds Metals and Kaiser in the United States, Alcan in Canada, Pechiney in France and Alusuisse in Switzerland.¹ In the 1940s the Chifley government planned a small aluminium smelter in Tasmania largely for defence purposes, and originally dependent on imported bauxite. Government co-operation with industry to search for indigenous bauxite feedstock for the smelter saw two discoveries of bauxite at about the same time in northern Australia in the 1950s—the first at Gove in the Northern Territory and the second, much larger find, across the Gulf of Carpentaria in Queensland. These two discoveries and the proving of bauxite deposits of commercial grade in Western Australia a few years later meant that Australia possessed an astonishing one third of the world’s bauxite by the early 1960s.²

Part of the history of Australia’s minerals boom in the 1960s and 1970s is the story of the emergence of companies which mined Australian bauxite, converted the bauxite to alumina and manufactured aluminium metal. While state governments were responsible for the development of bauxite in Queensland and Western Australia, the Commonwealth government determined how bauxite would be developed in the Northern Territory, and used this power to increase its influence over the emergent Australian aluminium industry. This article explores the evolution of Commonwealth policy with respect to mining bauxite on Aboriginal land in the Northern Territory and the complex commercial history which saw the establishment of what became the Northern Territory’s largest industrial enterprise at Gove in the 1970s.

While much scholarship has been devoted to the considerable significance of mining at Gove for the development of Aboriginal land rights and native title, this article is concerned with the broader economics and politics of the mine’s development.³ The article shows post-war Australian mining in a new light by providing evidence that shows how politically controversial it was in the 1950s and first half of the 1960s, whereas it is often assumed to have become so only in the late 1960s and 1970s. The article confirms that the federal government was just as concerned as the states to make industrial development in Australia a condition of access to large ore deposits. But it also shows how the Commonwealth was determined as early as the mid-1960s to make Australian equity another condition of mining companies obtaining federally-awarded mineral leases. This form of resources nationalism thus predated the policies of Labor Prime Minister Gough Whitlam, and his Minerals and Energy minister, Rex Connor, between 1972 and 1975.
In the 1950s the federal government was divided between some who favoured the Australian company, Consolidated Zinc Pty, and the British Aluminium Company developing both Northern Territory and Queensland bauxite, and others who wanted to establish an alumina industry in the Northern Territory separate from one in Queensland. After the split between the British Aluminium Company and Consolidated Zinc in 1960, the Menzies government pursued two goals: the first to make building a large alumina plant in the Northern Territory a condition of multinational companies mining the bauxite and the second to allow Australian equity in the enterprise. The conflict between these two goals of industrial development and Australian ownership almost saw the failure of the enterprise in 1968. The eventual success of the mining operation came about through Commonwealth assistance largely in the form of its allowance of significant bauxite exports while an alumina plant was being developed. Swiss Aluminium provided most of the capital for the development and took as its reward low-cost bauxite and alumina for aluminium smelters in Europe rather than profit. On the other hand, its Australian partner, Gove Alumina, while bearing substantial costs of infrastructure development and agreeing to take less than a 50 per cent stake, was able to earn good profits from bauxite and alumina exports and thus to break into the aluminium industry in the Asia–Pacific region. The arguments in this article thus support the findings of Kosmas Tsokhas that Australian mining companies were not dependent on foreign multinational corporations, but rather harnessed the financial and technical resources of these conglomerates in the pursuit of relatively independent strategies.\textsuperscript{4}
The Development of Bauxite at Gove, 1955-1975

The Comalco Experiment, 1952–1960

Well before the discovery of bauxite in the Northern Territory, the Commonwealth government had proclaimed an Arnheim Land Reserve on 14 April 1931 for the native peoples. Very few Europeans visited this remote part of the Northern Territory other than the staff of the Mission established in 1934 by the Methodist Church to provide medical services for the local Aboriginal peoples. During World War II the Royal Australian Air Force established an airstrip from which bauxite would have been clearly visible to its personnel though none of them appreciated its commercial potential. H.B. Owen, a Bureau of Mineral Resources (BMR) geologist, made the first reconnaissance of bauxite on the Northern Territory mainland in 1952 following the discovery of bauxite on the adjacent Wessel Islands group. By this time, the Commonwealth government and the British Aluminium Company had established a company, 51 per cent owned by the Commonwealth and 49 per cent by the aluminium company, to investigate the potential of Papua New Guinea to provide hydro-electric power for aluminium smelting. This New Guinea Resources Prospecting Company (NGRP) was also charged with investigating the bauxite potential of the Northern Territory. The NGRP undertook the first detailed geological assessment of Gove’s bauxite deposits in 1955. A year later, the British Aluminium Company applied for a lease from the Commonwealth government to mine the bauxite discovered at Gove.

The application for mining rights came only one year after geologists working for Consolidated Zinc Pty (CZP), the Australian subsidiary of the Consolidated Zinc Corporation, made an astonishing discovery of bauxite—much larger than the deposits in the Northern Territory—at Weipa in northern Queensland. The Vice-Chairman of CZP, Maurice Mawby, having served on the Copper and Bauxite Committee during World War II, had a shrewd intuition about the potential for bauxite to be discovered in northern Australia, and alerted his geologists to the possibility of finding it. CZP’s discovery of bauxite in Queensland and the British Aluminium Company’s interests in the bauxite of the Northern Territory provided an incentive for these two companies to jointly co-operate in establishing a new company, the Commonwealth Aluminium Corporation Ltd (Comalco), to develop the two deposits. The creation of L.B. Robinson, Chairman of CZP, and his Vice-Chairman Mawby, Comalco was registered in Queensland in 1956 and secured a lease on favourable terms of the best of the Weipa bauxite from Queensland Premier Vincent Gair. When Mawby informed the Menzies government of Comalco’s long-term objective of establishing an alumina and aluminium industry based on the joint development of the bauxite in Gove and Weipa, the Minister for Supply, Howard Beale, was sympathetic to the ambitions of the new company. His colleagues, Paul Hasluck, the Minister for Territories, and Senator William Spooner, the Minister for National Development, were less convinced. They considered that granting bauxite leases to Comalco at Gove, together with the mining rights at Weipa that the Queensland government had already granted it, would give that company a virtual monopoly of Australian bauxite. At that time the bauxite potential of Western Australia was not being considered. It was not until the end of the decade that a joint venture consisting of Western Mining
Corporation, Broken Hill South and North Broken Hill would form to mine the bauxite deposits in the Darling Ranges in Western Australia.\(^\text{15}\)

In late 1957 cabinet set up an inter-departmental group representing the departments of Supply, National Development, Territories and the Treasury with the objective of ascertaining whether it was possible to encourage competing aluminium interests into the Northern Territory.\(^\text{16}\) The inter-departmental group was quickly disabused that it could compel Comalco to give up its claims at Gove. By that time, the British Aluminium Company, through the New Guinea Resources Prospecting Company, had spent £22,000 testing the deposits, and it was normal mining practice for a company which had carried out such exploratory work to be given mining rights.\(^\text{17}\)

Moreover, British Aluminium’s new partner CZP had offered to make Comalco the vehicle for developing Gove by buying out the Commonwealth’s majority stake in the NGRP. Though cabinet concluded that the federal government could not immediately give Gove’s bauxite away to competing interests, it recognised that it could nonetheless establish stringent conditions under which Comalco developed the bauxite.\(^\text{18}\)

Specifically, some members of cabinet were interested in the possibility of requiring Comalco to build an alumina plant in the Northern Territory. As with state governments, the federal government sought to make local onshore industrial development a condition of access by mining companies to large commercial ore deposits.

Comalco, however, had no intention of agreeing to erect an alumina plant at Gove.\(^\text{19}\) It had already agreed to build an alumina plant in the state of Queensland, and in the late 1950s the company turned its attention away from developing the hydro-electric resources of Papua New Guinea. Instead, it came to favour a plan to exploit the hydro-electric potential of the south island of New Zealand for aluminium smelting, and in the interim to acquire the Australian government aluminium smelter in Tasmania.\(^\text{20}\)

There was a division in Menzies’ cabinet as to Comalco’s grand plan for an alumina plant in Queensland to convert Weipa and Gove bauxite into alumina, and for refineries to smelt aluminium metal from the alumina in Tasmania and New Zealand. Menzies and Beale favoured the claims of Comalco, representing as it did the coming together of CZP, which though a subsidiary of a British company was a long established and well respected Australian-led mining company based at Broken Hill, and the British Aluminium Company, which while not a member of the world’s biggest six aluminium companies, was still an important concern.\(^\text{21}\)

Although Comalco was British-owned, most of Menzies’ ministers were, as Hasluck later described them, ‘influenced largely by the fact that substantial control of the company was in Australian hands and the result would be the establishment of an integrated Australian aluminium industry serving export markets’.\(^\text{22}\) A minority, including Spooner and Hasluck, were reluctant to give Comalco a monopoly of Australian bauxite and harboured doubts about whether that company would succeed in establishing itself in the world’s aluminium industry.\(^\text{23}\) The Cabinet committee directed the departments of National Development, Territories and Supply to frame conditions for the development of the Gove deposits so as to ‘avoid a situation in which the deposits were merely quarried or shipped overseas’.\(^\text{24}\) Specifically, it recommended
stipulating that Comalco be required to develop an alumina plant of 400,000 tons per annum capacity within seven years, and to build an aluminium smelter within Australia and its territories in fifteen years.

When Beale consulted with Comalco, the company refused outright to give up its claims on Gove bauxite. By this time the Menzies government was aware that at least three of the big six aluminium companies, Alcan, Reynolds Metals and Kaiser Aluminium, were eyeing the bauxite at Gove. Though Hasluck raised his concerns formally in a submission to cabinet on 5 February 1958, CZP and the British Aluminium Company persuaded Menzies that Comalco’s plans for the joint development of Gove and Weipa bauxite were reasonable, and that any further requests made on the company ‘could easily result in the creation of a confused situation which would make our financing plans unworkable and ultimately have exactly the opposite effect to what is intended’.25 During three hours of discussion Spooner and Hasluck expressed reservations about giving Comalco the Gove lease, while Menzies concluded that it was not up to cabinet to judge the commercial viability of Comalco’s proposal.26 So strong were their representations that Menzies privately conveyed to representatives of CZP that he was ‘disgusted’ with Spooner and Hasluck.27

But in a concession to the dissenting views, Menzies agreed that if Comalco proved unwilling to proceed actively with concrete development proposals within a further three years, the federal government would cancel its lease. On 10 February 1958 Menzies wrote to Mawby, offering Comalco a special mineral lease covering about 5,000 hectares on the Gove Peninsula subject to the company’s spending £50,000 within two dry seasons, making an assessment of its probable method of developing Gove bauxite, and then agreeing to submit concrete and acceptable plans within a further three years.28 The lease became known as Special Mineral Lease Number one (SML 1). Under Hasluck’s influence, Commonwealth policy towards Aborigines had changed in the early 1950s from one of protection to assimilation. Flowing from this change, the Commonwealth government had persuaded the Northern Territory Legislative Council in 1953 to amend the Aboriginals Ordinance and Mining Ordinance to allow for mining on Aboriginal reserves on the ground that the ‘national’ interest in encouraging industries based on the development of bauxite equated to the interests of the Aboriginal peoples who would earn royalties from the development.29

Later in 1958, however, the British Aluminium Company was taken over. Although British Aluminium was the market leader in Britain, it was not competitive with the major aluminium companies in North America and had been frustrated in finding markets. In 1958 Reynolds Metals joined forces with Tube Investments of the United Kingdom to take over the British Aluminium Company. The hostile take-over of British Aluminium made Hasluck worried about the prospect now that an American company, Reynolds Metals, through its dominant influence in the British Aluminium Company, would tie up the bauxite deposits at both Weipa and Gove. Despite Comalco being granted an offer of the central mineral lease at Gove, other companies, including the British Rio Tinto Mining Company were expressing an interest in exploring uncommitted areas in the vicinity of the Gove central deposit. Hasluck felt that if the Menzies government’s interests were to establish two competing aluminium producers
in Australia, then Comalco should be refused additional leases at Gove beyond the lease it already had.\textsuperscript{30}

By August 1960, simmering tension between the new American management of British Aluminium and CZP had reached such a point that the two companies decided to dissolve their partnership in Comalco.\textsuperscript{31} CZP agreed to give up its claims to Gove in return for keeping Weipa, and British Aluminium consented to give up its claims to Weipa while holding on to Gove. The Prime Minister’s Department saw the split of the CZP–British Aluminium partnership as ‘of more than ordinary importance since it represents the last opportunity for the Government to influence in any substantial way the future structure of the aluminium production industry’.\textsuperscript{32} Cabinet took the opportunity by agreeing to the transfer of the Gove lease from Comalco (through the New Guinea Resources Prospecting Company) to the British Aluminium Company.

**The Gove suitors: Resources nationalism and industrial development in Northern Australia, 1960–1965**

Implementing the cabinet’s decision, Hasluck transferred Gove Special Mineral Lease Number 1 from Comalco to the British Aluminium Company on 6 November 1960. He hedged his bets, however, by allowing another company prospecting rights on the perimeter of the British Aluminium Company’s lease. This company was Gove Bauxite Corporation, a subsidiary of Duval Holdings Pty Ltd. The principal of the company, Frank Duval, a former Australian serviceman, had established himself in Japan after the war and had become involved in various mining ventures across Australia.\textsuperscript{33} Hasluck gave Duval Holdings the understanding that they would be able to export up to ten million tons of bauxite from Gove’s perimeter deposits and perhaps to construct an alumina plant in the Northern Territory if larger bauxite deposits were found. Realising that such a task was beyond their capacities, Duval Holdings invited the French company Pechiney, then the largest aluminium producer in Western Europe, to see whether it could take on the task. Pechiney agreed to register an Australian subsidiary, which was to seek the mining titles at Gove, for which Duval Holdings had applied, and undertook to the Menzies government to develop an alumina plant in the Northern Territory of 500,000 tons per annum capacity, by organising a consortium of aluminium producers.\textsuperscript{34}

Meanwhile, the British Aluminium Company—with by far the better of the Gove bauxite deposits—outlined its development plans for the central lease at Gove. British Aluminium sought the right to export ten million tons of bauxite. It was uncertain, however, as to whether it would erect an alumina plant, merely promising to make a definite decision by April 1966.\textsuperscript{35} Spooner and Hasluck much preferred Pechiney’s proposal to British Aluminium’s, and persuaded cabinet to give the French company what became Special Mineral Leases, 2, 3 and 4 at Gove.\textsuperscript{36} Pechiney was given the right to mine and export ten million tons of bauxite from the areas over 18 years, with an obligation to spend £300,000 over three years and to develop plans for the erection of an alumina plant with a capacity of 500,000 tons per annum within three years. As for British Aluminium, the Menzies government was in two minds. Though, it was not impressed by the firmness of its commitment to develop the main mineral lease
at Gove, the British Aluminium/Reynolds combination seemed to be the only companies taking an interest in it. But not requiring the British Aluminium Company to forfeit the lease would now be breaking faith with Pechiney, which had made what seemed to be a firm offer to build an alumina plant in the Northern Territory. The result was that on 8 May 1963, the Menzies government announced the forfeiture of the British Aluminium Company’s central bauxite lease at Gove. It reserved the central lease from mining and invited reasonable proposals for the development of what was believed now to be the only known and uncommitted deposit of bauxite in the non-communist world.

Only a few months afterwards, however, Pechiney abandoned its plan to build an alumina plant in the Northern Territory by becoming a partner in one in Queensland with Comalco. By this time Comalco itself was a partnership between Conzinc Rio Tinto of Australia (CRA)—the Australian subsidiary of the company which had formed after the merger between the Rio Tinto Company and Consolidated Zinc Corporation—and the American Kaiser Aluminium and Chemical Company. After buying the government aluminium smelter at Bell Bay from the Commonwealth government, Comalco persuaded rivals, Pechiney and Alcan, to join in a consortium of aluminium companies to develop an alumina plant at Gladstone in central Queensland. Pechiney had undertaken to purchase bauxite from Weipa for export to France and to secure its requirements for alumina from Gladstone. Now able to secure all its bauxite and alumina requirements from Queensland, Pechiney wanted to be relieved of its development obligations in the Northern Territory.

Hopes of building an alumina plant in the Northern Territory now rested with the applicants for the central lease. In 1964 the Menzies government received proposals to develop it from five companies—Swiss Aluminium, Reynolds Metals Company, United Uranium NL, American Metal Climax and Kathleen Investments. Of these the Menzies government was most attracted to the proposals from Swiss Aluminium, Reynolds Metals and United Uranium. The bid from United Aluminium had made a particular impression on the government. United Aluminium, though proposing to work with the Consolidated Mining and Smelting Company of Canada, offered to provide for majority Australian ownership of the venture, and ultimately to construct an aluminium smelter in Australia with a capacity to export 150,000 tons of metal per annum. Swiss Aluminium faced a deficiency of alumina and its traditional bauxite resources were behind the iron curtain. It asked for a period of two years in which it promised to spend £200,000 to examine the feasibility of an alumina plant with a minimum capacity of 500,000 tons per annum. Enticingly, the European company also announced that it was involved in discussions with the Australian Colonial Sugar Refining Company (CSR) on its participation in the venture.

At this early stage of the post-1960 mining boom in Australia, state governments, like the Brand government in Western Australia and the Gair and Nicklin governments in Queensland, had not been concerned about the issue of foreign ownership of the companies proposing to develop mining in their states. Their overriding motives were to encourage development in their states, and the royalties and employment which flowed from it. The attitude of the Commonwealth government was
more complex. The Commonwealth shared with the states a desire to encourage industrial development from mining by promoting the local processing of minerals through industrial enterprises such as steel and iron ore pellet plants, and alumina plants and aluminium smelters. But the Commonwealth government was much more concerned with the balance of payments than were the states. This concern led some federal ministers to want to require Australian equity in mining ventures in the hope of keeping more of the profits and dividends from mining within Australia. Federal ministers and their departments were conscious by the mid-1960s that alumina and aluminium projects, including fabricating plants, were substantially in foreign hands. Comalco, though Australian managed, was now British-American in ownership. Alcan and its Australian offshoot, Australuco, were Canadian in origin. The exception was Alcoa of Australia, which had burst on to the scene in 1961, establishing an alumina plant at Kwinana and an aluminium smelter in Geelong. Although 51 per cent owned by the American aluminium giant, Alcoa, it was 49 per cent Australian owned by the Australian companies, Western Mining Corporation, North Broken Hill and Broken Hill South.\textsuperscript{45}

It was these stirrings of resources nationalism in Australia that saw the Menzies government seek to promote Australian equity into the bauxite–alumina venture over which it had the most leverage, by introducing Australian equity as one of the criteria on which it would judge applications for the Gove lease.\textsuperscript{46} Because of the realities of the aluminium industry, however, ministers accepted that Australian companies would have to partner one of the big aluminium companies if they were to have a chance of raising the finance to develop Gove, and to find markets buyers for its alumina and bauxite.\textsuperscript{47}

In analysing the proposals, Spooner joined forces with Charles Barnes who had succeeded Hasluck as Minister for Territories.\textsuperscript{48} The fact that Comalco and Alcoa were by now providing for the aluminium needs of Australians meant that the output of any alumina produced in the Northern Territory would have to be exported. Because rates of interest on industrial debentures were lower in other parts of the world than in Australia, this implied that an Australian-financed aluminium enterprise would struggle to be competitive. Spooner and Barnes were therefore predisposed to the bids of the two large aluminium producers, Reynolds Metals and Swiss Aluminium. They were attracted by the firmness of Reynolds Metals’ intention to erect an alumina plant, but disheartened by the American company’s unwillingness to allow any Australian equity in it. This contrasted unfavourably with Swiss Aluminium’s coaxing of CSR into partnership. If the Australian company did accept the offer to participate, the ministers noted that it would be ‘extremely difficult on grounds of national policy to award the lease to any other contender’.\textsuperscript{49} On the other hand, the uncertainty about whether Swiss Aluminium would go ahead and build a plant in the Northern Territory compared unfavourably with Reynolds’ bid. In these circumstances the two ministers recommended inviting revised proposals within six months. In making these new proposals applicants would have to contemplate construction of an alumina plant with a minimum capacity of 300,000 tons per annum; commit to making a substantial deposit; and, importantly, to indicate in their proposal Australian equity participation. On 28 August 1964 Menzies followed up by writing to both CSR and the Broken Hill Proprietary Company (BHP) informing them...
that the government would welcome proposals from them, operating either alone or with other interests.\textsuperscript{50}

After Menzies’ invitation, Alusuisse firmed up its plans by proposing the development of a new company, the North Australian Bauxite and Alumina Company Ltd (Nabalco) that was to be split equally between Swiss and Australian interests. The Australian companies involved were CSR, the Australian Mutual Provident Society (AMP), Mutual Life and Citizens Assurance Company (MLC), Peko–Wallsend Investments, Commercial Banking Company, Elder Smith Goldsborough and Mount Morgan Limited. Nabalco offered to build a 500,000 ton per annum alumina refinery in the Northern Territory subject only to a positive feasibility report, and to only five per cent profits being realised, in which case the Swiss were prepared to proceed by themselves without their Australian partners. BHP joined forces with Reynolds Metals to make an unequivocal commitment to construct a 300,000 tons per annum alumina plant within eight years. While Barnes preferred the BHP/Reynolds bid, Spooner’s successor as Minister for National Development, David Fairbairn, opted for Nabalco’s.\textsuperscript{51} Cabinet decided in Fairbairn’s and Nabalco’s favour because the Australian partners in the company collectively had more access to Australian capital than BHP, were offering to fund the infrastructure of a town at Gove save for a school and hospital and were not, like BHP/Reynolds, insisting on immediate access to Gove’s perimeter leases as well as the central lease.\textsuperscript{52}

As for the perimeter leases, Pechiney’s Australian subsidiary spoke to Alusuisse representatives in Zurich and proposed the possibility of participating in Gove, either by buying shares in Nabalco or by entering into a Gladstone-like tolling agreement whereby they might convert bauxite from the perimeter leases into alumina. Although Alusuisse rejected both of these suggestions, Pechiney asked that it should be allowed to retain its Gove leases in the hopes that it might be able to talk Nabalco around after the latter had completed its study of the central lease in 1968. Barnes consulted his colleagues on what to do, and secured their agreement that Pechiney should surrender the leases. Although Barnes wanted to make aluminium smelting, powered by subsidised atomic power, a condition for Nabalco getting the perimeter leases, eventually the perimeter leases were promised to the company if it built an alumina plant larger than one of 500,000 tons per annum capacity.\textsuperscript{53}

\textbf{The formation of Nabalco and the dispute between the Colonial Sugar Refining Company and Alusuisse}

Nabalco set up its headquarters in three floors of the 24-story Goldfields House in Sydney’s Circular Quay. The chairman of the new company was former Changi prisoner-of-war and Sydney barrister, David Griffin, Managing Director of Alusuisse’s Australian subsidiary, Swiss Aluminium Mining Pty Ltd. Of the individuals representing the Australian partners in Nabalco, the General Manager of the Colonial Sugar Refining Company, Sir James Vernon, was the most important. Predicting the long-term consequences to Australia’s trading patterns of Britain’s prospective entry into the European Economic Community (EEC), CSR under Vernon’s leadership successfully negotiated long-term sugar contracts with Japan in the 1960s.
Simultaneously, CSR actively sought out opportunities to diversify from sugar into new ventures by making significant investments in the Mount Newman iron ore project and Gove’s bauxite.  

From its headquarters in Sydney, Nabalco undertook a one million dollar feasibility study which explored the bauxite at Gove, examining soil conditions, tides, the weather, estimated profits and social aspects of the development. Architects, engineers and draftsmen in Sydney turned out thousands of plans of the town, bauxite crushing station, alumina plant and port. The plan for the town was a mixture of Swiss taste and Australian practicality. It provided for a town centre to be built about six miles from the alumina plant that included a community shopping mall, hotel–motel, community hall, library, town administration offices and a primary school. A residential area was to be established north and south of the town centre containing a mix of low-set family homes and double-story bachelor units.

The feasibility study conducted by Nabalco over about two years indicated that an alumina plant with a 500,000 ton per annum capacity would cost $A212 million to construct or $A424 per ton of capacity. The immensity of the costs is illustrated by the fact that $A200 million in 1968 dollars is equivalent to about $A2.3 billion in 2014 dollars. The major investment problem for the Australian partners in having to come up with even half this sum lay not so much in the considerable amount of money that had to be raised, as in the meagre amount of profit available to service the agreement. One of the main reasons for the poor economics was the need for Nabalco to provide the cost of community infrastructure such as township, power supply, water supply and port. This contrasted with the position of other alumina enterprises being built in established areas such as Alcoa’s plant at Kwinana in Western Australia and the Gladstone alumina plant being built by a consortium of companies led by Comalco.

Representatives of CSR were disheartened by the feasibility study and criticised the project as over-capitalised, citing as an example the location of the planned alumina plant at Gove when Darwin would have been a possibility, and the erection of an expensive conveyer belt over a twelve-mile haul. Moreover, from the Australian partners’ perspective, the price of the bauxite and alumina they exported was also too low. Admittedly, the Australian partners had the option to take their share of the alumina from the plant directly and sell it on the open market, but this option would prove risky because the form of alumina to be produced at Gove (floury alumina) was not readily marketable to buyers other than the Swiss. Alusuisse, on the other hand, was not prepared to pay its Australian partners more than $A51 per ton for alumina and $A3.50 per ton for bauxite. CSR’s research had shown that $A4.50 per ton was a reasonable price for bauxite and $A55 per ton for Gove alumina.

Before the feasibility study was formally submitted to the government, representatives of Nabalco divulged the alarming conclusions to Barnes in December 1967. The option for a 500,000 ton per annum plant, they informed him, was a ‘hopeless’ proposition and government assistance would be required to see even a moderate profit. The cost estimates relieved the Australian partners of any formal commitment to the project under their original 1964 agreement with Alusuisse. Two areas of strength in the report, however, were Nabalco’s verification of larger bauxite
deposits in the central mineral lease, at least 162 million tons, and the capacity of Alusuisse to absorb a much higher quantity of the bauxite and alumina output. Nabalco indicated that it could surmount its problems by contemplating building a much larger alumina plant in return for the government permitting some bauxite to be exported. The company therefore sought early government approval of bauxite sales, since Alusuisse would have to modify its European alumina plants to accommodate the bauxite. In addition, Nabalco suggested that the Commonwealth should increase its financial contribution to the costs of building the township from $A3 million to $A39 million.

Company representatives concluded by informing Barnes that Nabalco would go ahead at Gove with at least a 500,000 ton per annum alumina plant but needed to make a decision on whether their Australian partners would still be participating by 31 May 1968.

The prior notification to Barnes of the impending bad news on Gove saw detailed consideration by the Gorton government—particularly National Development, Territories and the Treasury—about how it should respond to the requests for assistance. As Barnes would later advise his cabinet colleagues: ‘C.S.R. are evidently coming to suspect that the Australian partners have been used as a “stalking horse” to obtain the leases for Nabalco and now that this end is in sight, the Swiss are no longer concerned with the continued participation of the Australian Partners’. Without further Commonwealth action, the Australian partners would withdraw, but the government had to decide whether it was worth encouraging Australian participation at Gove, or to simply let the contemplated Australian investment lapse. This was a political problem rather than simply a question of economic calculation, as would be demonstrated when the Labor Party Opposition subsequently criticised the mere reduction of Australian equity in the project as a ‘policy of sell-out by default’.

In favour of the federal government intervening was that if the company built a one million ton alumina plant in the Northern Territory, it would be the second largest alumina plant in the world and the largest ever built in one stage. The predisposition of the Department of Territories had been that only alumina but not bauxite would be exported from Gove, and that exporting bauxite necessitated specific approval by the Minister for Territories. Treasury’s view, on the other hand, was that the export of some bauxite could be approved. Providing further financial support for the township at Gove, however, was more problematic. One of the main reasons why the Menzies government had preferred Nabalco’s bid to that of BHP/Reynolds was that the former had offered to provide all of the infrastructure at Gove except for a school and a hospital. BHP/Reynolds, by contrast, had requested a school, hospital, roads, sewerage, water and power, dams, airstrip and an airport facility. But all in all, the Treasury worried that providing a level of assistance that would help the Australian Partners turn the profits they desired could involve federal Commonwealth expenditure so large that it would encourage the states to use it as a precedent for seeking federal funds for state mining projects.

Because of the clouds hanging over the project, CSR was most reluctant that Nabalco should sign an agreement with the Commonwealth. In February 1968, according to one Treasury official, the Secretary of the Department of Territories,
George Warwick Smith, ‘more or less held a gun at Vernon’s head and insisted on the Agreement being signed forthwith’. Vernon reluctantly agreed and on 23 February 1968 the agreement was signed. It committed Nabalco to build an alumina plant of not less than 500,000 tons per annum capacity by the end of 1971 and to retain the existing 50 per cent Australian equity unless its feasibility study showed an expected profitability of less than 7 1/2 per cent return on capital after tax. If Nabalco’s drilling of the perimeter leases proved favourable and the Commonwealth gave them the extra leases, it would be required to build a plant of not less than 750,000 tons per annum. The company undertook to pay royalties of 30 cents per ton on untreated bauxite and 20 cents per ton on bauxite treated in Australia, the receipts of which would go to the welfare of the Aboriginal inhabitants of the Northern Territory.

**Figure 1:** Nabalco Bauxite and Alumina Plant, Gove, Arnhem Land, General view of alumina plant 1972

Despite the agreement having been signed, it was not a bankable document to secure the Australian share of the financing of the project. The biggest obstacle was a fundamental difference of objectives between the Australian and Swiss partners in Nabalco, that had always been latent, and that came to the surface in meetings in Zurich in 1968 before and after the signing of the agreement. The fundamental objective for
The Development of Bauxite at Gove, 1955-1975

the Swiss giant was to secure for their international operations a large and secure supply of alumina. For the Australian group of companies, on the other hand, it was necessary that the investment they made in the Gove project should be feasible on its own terms. The Australian companies would need to enjoy reasonable profitability and to have sufficient cash flow to cover the costs of interest payments on borrowed capital.

When CSR representatives visited Alusuisse in Zurich in February 1968 they put their view that Alusuisse had an obligation to pay the Australian partners more than $A51 per metric ton of alumina so as to keep the Australian partners in the project. Alusuisse reacted strongly and adversely to CSR and stated that the agreement that Alusuisse had reached with CSR in 1965 did not imply that the alumina price should be such as to give the Australian partners an agreed return on their investment. The Australian partners, they insisted, had merely been given the option to withdraw from the project if the return on the capital they invested was going to be less than 7.5 per cent. In a desperate effort to maintain Australian equity in the project, CSR then sketched a different arrangement: a joint venture instead of a single company and a plant doubled in size to a one million ton per annum capacity. Each party would own 50 per cent of mineral lease, mine and port. But the alumina plant would be 70 per cent Swiss and now only 30 per cent Australian.

CSR proposed that Alusuisse would have the right to take 70 per cent of the alumina from the plant at cost, and enter into a twenty-year contract to buy the alumina of the Australian partners at a price to be negotiated. The Australian partners hoped to earn a profit from the alumina they sold to Alusuisse, and in due course to others, and asked for a priority in the profits earned from the sale of bauxite from Gove. CSR hoped, moreover, that the government would approve both its new plan and the reduction of Australian equity in the venture. In favour of the new plan was that there would be a massive entry of Swiss capital into Australia, of $A200 million, spread over the period of the construction of the plant, which would not be serviced directly by remittance overseas of interest or dividends.

Following the first meeting in Zurich in February 1968 the Australian participants in the Gove venture regrouped in Sydney and agreed that they would try to stay in the project by negotiating a different arrangement with the Swiss. At this meeting, Vernon maintained his opinion that the Australian partners were entitled to see a nine per cent return after tax on their investments during the first three years, and thereafter to see a growth in their prospects. Armed with Vernon’s support, CSR representatives visited Zurich again in May. Its representatives conveyed to Alusuisse its thoughts about the high costs of the project and also the opinion that the world price of alumina in Australian dollars per metric ton was higher than the price of $A51 per metric ton which the Swiss had offered the Australian partners. The Swiss countered with a firm insistence that $51 was the ‘going price’. It would be suicidal, they declared, for them to proceed with building a 500,000 ton per annum capacity alumina plant on a losing basis, and on top of that have to pay its Australian partners a nine per cent return on their capital. Alusuisse would not agree to pay their Australian partners nine per cent return on a 500,000 ton plant, nor would they negotiate an agreement for a larger plant when the sword of Damocles (a commitment to pay the Australians a guaranteed
return) was hanging over their head. In these circumstances the Swiss indicated that they would have to fly to Canberra and inform the Australian government that they would not be spending any more money on the Gove project.72

The Australian government tried to intervene later in May by also pressing the Swiss on the alumina price. By this time the Department of Territories had been split into a Department of External Territories and a Department of Interior, the latter responsible for the Northern Territory. Peter Nixon, the Minister for the Interior, wrote to Nabalco’s David Griffin on 28 May suggesting that the alumina price of $A51 per metric ton was significantly lower than the Commonwealth government anticipated, diverting a substantial amount of the profits from the development of the bauxite from Australia.73 Griffin countered by referring to realpolitik in the world aluminium industry.74 He pointed out that the quantity of alumina produced from an enlarged plant at Gove would be one of the largest from a single plant anywhere in the world. There were, he added, only four aluminium companies in the world producing sufficient aluminium metal to justify their purchasing one million tons of alumina and these companies were fully integrated. In these circumstances, he elaborated, it would not be possible for a vendor to offer such a quantity of alumina for sale (in excess of $1,000,000,000 over 20 years) ‘if the price were not within the general levels paid within the industry for such quantity by fully integrated competitors’.75 He further argued that it would be inconceivable for any aluminium company to commit itself to purchase the whole of its requirements for alumina from a single source for so long a period, in addition to binding itself to paying more than what its competitors were prepared to pay—that would expose it to ‘extinction as a viable member of the industry’. Griffin concluded, $A51 per metric ton was not only reasonable but ‘would be the highest possible price that Nabalco could expect to receive for it’.76

After the debacle of the May 1968 meeting in Zurich between CSR and Alusuisse, the two companies set about negotiating an entirely new agreement for a larger alumina plant.77 The compromise was hammered out in a five-page Heads of Agreement initialled by the parties. CSR and its other Australian partners set aside their previous aspiration of relying on a disputed 1965 legal agreement to reward them with a nine per cent return on their investment. The two sides agreed that instead of having a single company, Nabalco, there would be a joint venture arrangement where ownership was by two separate companies as tenants in common.78 While not liking the reduction of Australian equity in the project, the government accepted that stipulating a higher price for the alumina would see the Swiss revert to a smaller size alumina plant and the Australians withdraw.79 The Commonwealth agreed to the deal, including bauxite exports in favour of the Australian partners, and a slightly higher Commonwealth contribution to the town, now known by its Aboriginal name, Nhulunbuy. When, later in 1969, local aboriginal peoples attempted to halt the mining as against the interests of the local owners of the land, the Commonwealth took the lead from Nabalco in fighting the claim, based as it was on the first articulation of the concept of native title in Australian courts.80 After Justice Blackburn’s decision against the plaintiffs in 1971 the mine went ahead, and Prime Minister William McMahon formally opened its first stage on 1 July 1972.81
Conclusion

Although the bauxite at Gove was the first of the major Australian deposits of bauxite to be discovered during Australia’s post-World War II mining boom, it was the last to be developed. Commonwealth policy on mining in Gove centred on two objectives: to promote industrial development in remote northern Australia, which would process the bauxite into alumina, and to encourage Australian equity in the enterprise. Satisfying these objectives was part of the reason for the two decades it took to establish the mine in remote northern Australia. The Consolidated Zinc–British Aluminium arrangement founded when British Aluminium was taken over by American interests, and their leases were divided between Consolidated Zinc at Weipa and British Aluminium at Gove. In the early 1960s both British Aluminium and Pechiney were forced to surrender their leases at Gove because of the federal government’s dissatisfaction with their proposals for development in the Northern Territory. Finally, a partnership between Swiss Aluminium and Australian companies led by CSR were given the leases.

The conflict between the Commonwealth’s development objectives and its requirement for Australian equity almost saw this arrangement fail too. It was rescued in 1968 when the Swiss and Australian partners came up with a compromise plan, involving building the second largest alumina plant in the world, and giving the Australian companies the benefit of the profits of some bauxite exports. While Swiss Aluminium expected that the Australians would be forced to sell their share of bauxite and alumina at low prices to the Swiss, this proved not to be the case. Because of the contacts CSR had already established as a trader with the Japanese in sugar and iron ore, it quickly arranged to sell some of its export and alumina at good prices to the Japanese company, Mitsui. A new Australian aluminium company, Gove Alumina, thrived, as would be demonstrated in the early 1980s when it took a share in an aluminium smelter at Tomago in New South Wales.

Endnotes

3 Peter Gillies, Bob Cleworth and Gisele Kapterian, ‘Gove: forgotten catalyst for native title or are we just where we started? Native title and the mining industry from Gove to the present day’, *International Journal of Private Law*, vol. 1, number 1/2, 2008, pp. 137-152.
6 Letter from G.O. Gutman to David Griffin, 28 August 1967, A452, 67/3658, NAA.
7 Notes for Howard Beale to Arthur Fadden, 16 January 1957, folder 55, Maurice Mawby Papers (hereafter MP), Accession 1981.0127, University of Melbourne Archives (hereafter UMA).
8 Note by S.F. Derbyshire on Gove Bauxite, 7 October 1957, folder 55, MP, UMA.
9 Ibid.
10 H. Evans, Preliminary Report on Bauxite Deposits, Albatross Bay, North Queensland, 11 January 1956, folder 10, MP, UMA.
12 Letter from Mawby to Gair, 10 January 1957 and letter from Gair to Mawby, 27 February 1957, folder 181, MP, UMA.
13 See draft cabinet submission by Beale, n.d. 1957, folder 55, MP, UMA.
14 Letter from G.D. Grant, Department of National Development to F.A. O’Connor, Secretary Department of Supply, 1 March 1957, folder 55, MP, UMA.
15 Raggatt, Mountains of Ore, p. 95; Kosmas Tsokhas, Beyond Dependence, pp. 18-26.
16 Report of inter-departmental committee on Gove Bauxite Deposits, 21 January 1958, A4940, C2323 part 1, NAA.
17 Notes by Prime Minister’s department on cabinet submission by Beale, 20 January 1958, A4940, C2323 part 1, NAA.
18 Report of inter-departmental committee on bauxite, November and December 1957, NAA: A4940, C2323 part 1, NAA.
19 Memorandum of discussion: L.B. Robinson, Chairman Consolidated Zinc, Geoffrey Cunliffe, Deputy Chairman, British Aluminium Company, Maurice Mawby, D.J. Hibberd, Director Commonwealth Aluminium Corporation, Beale and F.A. O’Connor, Secretary, Department of Supply, nd. 1958, and letter from L.B. Robinson to Alfred Baer, 28 January 1958, folder 55, MP, UMA.
20 Letter from Mawby to Hasluck, 23 December 1959, A4940, C2323 part 1, NAA.
22 Submission 808 from Hasluck to Cabinet Committee, 19 August 1960, A4940, C2323 part 1, NAA.
23 Paul Hasluck, Cabinet Submission 1013, 5 February 1958, A4940, C2323 part 1, NAA.
24 Cabinet decision 1156 (HOC), 13 December 1957, A4940, C2323 part 1, NAA.
25 Letter from Geoffrey Cunliffe to Menzies, 5 February 1958, folder 55, MP, UMA. See also Hasluck’s submission, 5 February 1958, A4940, C2323 part 1, NAA.
26 Comments by Prime Minister’s Department on submission 1013 by Hasluck, 10 February 1958, A4940, C2323 part 1, NAA.
27 Letter from Mawby to Baer, 17 February 1958, folder 55, MP, UMA.
28 Letter from Menzies to Mawby, 18 February 1958, A4940, C2323 part 1, NAA.
30 Submission 446 from Hasluck to Cabinet, 6 November 1959, A4940, C2323 part 1, NAA.
32 Notes by Prime Minister’s Department on Hasluck’s submission 808, 22 August 1960, A4940, C2323 part 1, NAA.
34 Submission 528 from Spooner and Hasluck to cabinet, January 1963, A4940, C2323 part 1, NAA.
35 Notes by A.W. McCasker, Prime Minister’s Department, A4940, C2323 part 1, NAA.
36 Cabinet decision 650, 13 February 1963, A4940, C2323 part 1, NAA.
37 Submission 643 from Hasluck and Spooner to cabinet, 19 April 1963, A4940, C2323 part 1, NAA.
38 Cabinet decision 781, 8 May 1963, A4940, C2323 part 1, NAA.
39 Cabinet submission 233 from Barnes and Spooner to cabinet, 28 May 1964, A4940, C2323 part 2, NAA.
40 Note by Department of National Development and Department of Territories, 21 May 1964, A4940, C2323 part 2, NAA.
41 Notes by Prime Minister’s Department on Cabinet submission 221, 28 May 1964, A4940, C2323 part 2, NAA.
42 Note by Department of National Development and Department of Territories, 21 May 1964, 21 May 1964, A4940, C2323 part 2, NAA.
43 Letter from Walter Rice, Reynolds Metals to Charles Barnes, 2 May 1964, A4940, C2323 part 2, NAA.
44 Cabinet submission 233 from Barnes and Spooner, 28 May 1964, A4940, C2323 part 2, NAA.
The Development of Bauxite at Gove, 1955-1975

46 Cabinet decision 272, 2 June 1964, A4940, C2323 part 2, NAA.
48 Cabinet submission 233 from Barnes and Spooner, 28 May 1964, A4940, C2323 part 2, NAA.
49 *Ibid*.
51 Submission 931 from Barnes to cabinet, 12 July 1965 and submission 911 from David Fairbairn to cabinet, 9 July 1965, A4930, C2323 part 2, NAA.
52 *Ibid.*, Notes by J. Colwell, Prime Minister’s Department on submissions by Fairbairn and Barnes, 16 August 1965; cabinet decision, 7 September 1965.
56 *Ibid*.
57 Notes by CSR on policy issues, particularly percentage of Australian ownership, 8 October 1968, A1209, 1967/7863, NAA.
58 Department of Territories note on Nabalco’s interview with Barnes on 7 December 1967, A1209, 1967/7863 part 1, NAA. Griffin and Vernon were present with directors of Alusuisse.
59 Nabalco aide-memoire, 5 December 1967, A1209, 1967/7863 part 1, NAA.
60 *Ibid*.
61 Department of Treasury minute to Conron, n.d. 1968, A571, 1966/3337 part 6, NAA.
62 Letter from Barnes to Gorton, A1209, 1967/7863 part 1, NAA.
64 Department of Treasury minute to Conron, n.d. 1968, A571, 1966/3337 part 6, NAA.
65 *Ibid*.
66 Announcement by Barnes on the agreement to develop Gove bauxite, A1209, A452, 1968/1204, NAA.
68 Highly confidential note by CSR on Australian/Swiss Relationships over Gove Alumina Project, A1209, 1967/7863 part 1, NAA.
69 Notes by the Australian partners on Gove project for discussion with the Commonwealth, 27 May 1968, A1209, 1967/7863 part 2, NAA.
70 CSR note of discussions between CSR and Alusuisse in Zurich, 14 May 1968, A571, 1966/3337 part 7, NAA.
71 Record of meeting between representatives of Nabalco, the Minister for the Interior, and the secretaries of the Department of National Development and the Department of the Interior on 6 June 1968, A1209, 1967/7863 part 1, NAA.
72 CSR note of discussions between CSR and Alusuisse in Zurich, 14 May 1968, A571, 1966/3337 part 7, NAA.
73 Letter from Nixon to Griffin, 28 May 1968, A1209, 1967/7863 part 1, NAA.
75 *Ibid*.
76 *Ibid.*. See also letter from E.R. Meyer (Chairman) and P.H. Muller, Director, of Alusuisse, to Nixon, 20 August 1968, A1209, 1967/7863 part 1, NAA.
78 Submission to Minister for Interior on Gove Alumina Project, August 1968, A1209, 1967/7863 part 1, NAA.
79 Draft cabinet submission by Nixon, October 1968, A1209, A1967/7863 part 2, NAA.
81 Statement by McMahon, Official Opening of Nabalco, 1 July 1972, A1209, 1976/520, NAA.
82 Oral history interview by R.G. Jackson, series 6, box 10, MS8353, National Library of Australia.