

KEMICA (AUSTRALIA) – A

“It is difficult to keep Joint Venture valuation negotiations focused on facts and data. Sooner or later they turn into a test of wills among the prospective partners.” Bill Thimble, a senior investment banker for CS First Finance (CSFF), made the comment as his clients settled into their chairs in a small, windowless conference room. It was December 6, 1997, and Bill had mixed feelings about the plans of his clients. Mission Oil (MISOL) and Flagler Chemical (FCC). These clients were 50/50 owners of an existing Australian polyethylene manufacturer, called Kemica. Thimble’s firm had been hired by Kemica's owners the previous year to acquire a German-owned producer, Teuton Plastics Pty., whose facilities adjoined Kemica's property. The plan had been to complete that acquisition and then sell the consolidated venture. The takeover had been accomplished in March 1997. Within months of closing however, Asian markets had crashed, sending polyethylene demand and prices spiraling downward. With prospects for a quick exit from Kemica less favorable, MISOL and FCC were now considering new plans, and asking Bill to advise on whether these would help the ultimate goal of exit.

As the divestment prospects for Kemica deteriorated, FCC and MISOL (the Partners) had begun to consider a local JV opportunity more seriously. Orca Pty., the spin-off of a major European chemical company, was the other polyethylene producer left in Australia. It had long favored a merger with Kemica, and had made yet another approach during the summer of 1997. Now senior executives of the Partners were in Melbourne at Orca’s headquarters, to discuss specifics with their Chairman and polyethylene Vice President. The three potential partners had found themselves well-aligned on broad objectives. Each favored forming a joint venture as a means to create value to enhance a subsequent sale. With such preliminaries having gone well, the MISOL and FCC executives had requested a brief recess for consultations with Bill. Approaches to JV valuation would be the next discussion topic. Bill would soon have to decide whether to endorse moving towards a JV or keeping Kemica independent. Endorsing the JV would likely mean a delayed sale (and delayed commission for CSFF), but quite possibly higher ultimate sales proceeds for MISOL and FCC.

“Well Bill, how do you suggest we pursue valuation discussions, and more importantly, how do you suggest we decide whether this JV is going to be worth the time and effort?” Kurt Robinson, FCC’s VP for Basic Chemicals had not been an early supporter of the JV idea. Kurt had been Flagler’s key executive on the acquisition of Teuton Plastics. In the course of getting that project approved, he had promised management there would be quick progress towards a final disposal of Kemica. Now he had a dilemma. In the wake of the Asian crisis, CSFF’s price quotes for a Kemica sale had dropped approximately \$100 M from the \$300 M level indicated during the Teuton acquisition. Forcing a sale at the \$200 M level would not vindicate the acquisition. The JV promised a way to both return Kemica to a higher valuation and facilitate a sale under later, improved market conditions. Consequently, Kurt was eager to press Bill for an assessment and tactical approach that might prove more robust than an immediate forced sale. Kurt knew however that FCC management might prove quite skeptical of a JV recommendation. FCC had extensive experience with joint ventures and knew them to be time consuming, risky, expensive to put together, and difficult to manage. The economics of the JV would have to be compelling, or FCC would probably decide to stick with Kemica and sell now or at a better time. Such an

outcome would undoubtedly expose Kurt to criticism in the interim for failing to dispose of Kemica at prices promised when Teuton was acquired.

In pondering how to respond to Kurt's question, Bill reflected quickly on the key background points pertaining to Kemica and Orca's plastics business. For obvious reasons, Bill knew a lot more about Kemica than the Orca business. For one thing, CSFF had put together an information memorandum on Kemica when it anticipated moving quickly to sell the business. This memorandum contained a good background summary of Kemica's assets, history, and competitive advantages (Attachment 1). It also contained a pro forma cash flow reflecting business expectations at the time of the Teuton acquisition (Attachment 2). More recently, Kemica had provided a much more conservative cash flow, based upon their approved 1997 Corporate Plan (Attachment 3). This cash flow showed the dramatic impact of deteriorating business conditions throughout Asia, but also touched on some of the historic problems experienced by Kemica, such as relatively low reliability factors in its plants, high fixed costs and headcounts and questionable profitability in some of its smaller volume business lines. As far as Orca plastics was concerned, all Bill had available was a high-level summary provided by Kemica management and a recent stock market analyst reports on Orca which highlighted recent results for Orca's Plastics division (Attachments 4-5).

Finally, Bill remembered that Kemica's finance team had compiled an analysis of possible synergies which the merger would produce (Attachment 6). The adequacy of these synergies would have an important bearing on the overall attraction of the J.V. to FCC and MISOL.

Bill then decided to begin answering Kurt's questions with some general advice on JV negotiations.

"There is no simple answer to your questions Kurt, but here are some things to consider. In JV negotiations, the prize is the respective share of the JV awarded to the prospective partners. Both provide information to the other for purposes of evaluating the relative value of the two businesses. Thus, there is a 'competitive data' dimension to JV negotiations that is different from straight sale situations; there only the seller is providing data and the buyer is evaluating. To the cynically-minded, JV negotiations could be seen as a 'liars competition'. This however is an unfortunate approach. The partners need to remember that they will be living with each other post-merger. If one partner effectively misleads the other about valuation, it can poison the JV from day 1. Thus, I prefer to advise prospective JV partners to find a process whereby they can start with business data of equal reliability - and in the best case equally reliable, high-quality data."

"There exist several ways to produce comparable data for negotiations. One would be to simply work off historical information that has been audited. Both sides provide the other with 5 recent years of audited results; the two sides develop valuations of both businesses, and negotiate. The aim of this approach is to eliminate debate about the data exchanged and to minimize the variables available for use in making optimistic projections. The risk is that both sides still need to make projections about the future; this brings into play many variables, such as cost reductions or market share trends, can be quite significant in the final valuations."

"The second approach builds upon the first. Both sides still exchange historical information. However, they also identify, and agree upon, key planning bases concerning the future. For example, the parties will agree upon overall market growth and a pricing outlook for their products. This further limits the number of variables in play. However, it does not stop parties from claiming they have existing plans for dramatic changes in their business, which changes just happen to create large amounts of value."

A third approach is for both sides to exchange their most recent "approved" business plans. The presumption here is that these plans will be realistic, in that they were not especially prepared for the purpose of selling or joint venturing the business. If this assumption holds, the partners should get fairly accurate assessments of their counterparts business, projections which incorporate the best estimates of knowledgeable planners about all key aspects of the business. There are risks here too, however. Corporate cultures differ and one may make more of a habit of forecasting optimistically in annual plans. There is also the risk that specific business management for one of the partners knew that in might be "in-play" and came in with optimistic projections to forestall action. In effect, that company's prospective partner is relying upon the other company's senior management to have corrected any excessive optimism before "approving" the plan. Finally, there are the inherent problems of the two plans having been done at different moments, for different periods of time, using different bases. Getting them on a comparable basis then becomes a negotiation in itself."

"The last approach is for both sides to develop new business cases for their own business and submit them to a knowledgeable consultant. The consultant is empowered to conduct due diligence with both parties and then submit his own recommended cases to the partners. Under this approach the consultant evaluates both the businesses and the credibility of the partners' claims about the future. To the extent the consultant perceives systematic bias by one of the partners, he's authorized to discount that partners claims more severely. The aim then is to produce a 'truth-teller's competition', wherein the natural tendencies toward optimism and exaggeration are tempered by the fear of being 'found out and marked down'. Once the consultant issues his report, the two parties are still free to negotiate and bring forth additional information. However, the presumption is that the consultant has provided an 'objective starting-point.' The potential virtues of this approach are self-evident. The risks are avoiding a 'presentations competition' wherein each side strives to better mislead the consultant, finding a consultant knowledgeable enough to conduct the evaluation in the face of such efforts, and the general discomfort of entrusting important valuation elements to a third party."

Becoming somewhat impatient, Kurt commented: *"That's very interesting philosophy, but what do you recommend we do in Kemica's particular situation. Moreover, how do we determine whether this JV would be worth the time and effort?"*

"I was just coming to that," remarked Bill. "Aggregate synergies are the best starting point for determining whether a JV is attractive. Look at the size and quality of the projected synergies and evaluate how much they will add to the business value. Weigh that against the effort, cost and risk inherent in the JV. Be sure to take into account that higher JV value down the road must be discounted for time-value relative to selling now. Make sure you also take into account how the base business will evolve and perform over the extra time it takes to create the JV and realize its synergies. This assessment will tell you whether the JV as a whole makes sense. You

will still need to then evaluate whether the share you can achieve in the JV makes it attractive to FCC. This involves not only our previous discussion on the relative value of the two 'base businesses', but also how to allocate the projected synergies among the partners. You can negotiate who gets to add what synergies to their base business valuation, based upon arguments that it is the base business that is producing particular synergies. Or, you can simply decide that synergies are a function of the two businesses coming together, and allocate synergies on a 50/50 basis to the base business valuations."

Kurt Robinson sensed again that his banker was providing considerable advice but no recommendation. It would ultimately be up to him to decide whether the joint venture with Orca was attractive enough to justify the effort. Leaving personal considerations aside, Kurt knew he needed to consider seriously the option of selling Kemica now. He was confident that FCC/MISOL would at least realize the \$200M in sale proceeds quoted by CSFF. Bank advisors usually gave 'low ball' estimate at the beginning of a divestiture, so as to ensure the actual price would not disappoint the client. Would the joint venture add enough value to a future sale to compensate for the continued effort the shareholders would devote to this project, the risks of teaming up with another partner with unfamiliar operations, and the foregone time-value of money?

As he pondered the tradeoffs, Kurt's mind turned to 'Synergy Report' (Attachment 6), which had been prepared by a joint task force of Kemica and Orca financial planners. Perhaps if he could determine the likely level of joint venture synergies, Kurt could estimate the Net Present Value created by the joint venture. Some portion of this sum would potentially be an 'add-on' to the base value of Kemica. Selling at a better time in terms of the Asian polyethylene market might also produce a higher sales price. However, to complete his analysis of selling now versus concluding a joint venture, Kurt realized he would also have to estimate what percentage ownership in the venture, including synergies, he'd be able to procure for FCC/MISOL via negotiations with Orca.

That, he realized, required not only an estimate, but development of a negotiating strategy to assure achieving at least that target ownership percentage.

Kemica Australia - Executive Summary

Kemica Australia (KA) is one of two domestic producers of polyethylene in Australia. KA's operations are located near Melbourne, but it supplies customers in all sectors and regions of the Australian market. KA's principal product is High Density Polyethylene (HDPE), which is used to make liquid containers, pipe and some film products. Following its recent takeover of nearby Teuton Plastics, KA holds an 80% share of the Australian HDPE market, and is the only domestic producer. The remaining share of Australian HDPE consumption is provided by imports. KA also produces Low Density Polyethylene (LDPE), and Polypropylene (PP). KA's market shares in these products were lower, 35% and 25% respectively. KA also operates two steam crackers, each of which produces approximately 100KTA of ethylene. KA consumes virtually all of this ethylene internally in the manufacture of polyethylene.

History of KA

KA was formed in 1963 through the merger of subsidiaries owned by Flagler Chemical (FCC) and Mission Oil (MISOL). FCC's operation consisted of a steam cracker fed by ethane from offshore gas fields. MISOL's subsidiary operated a Naphtha cracker, which took feed from a nearby MISOL refinery. MISOL then combined its own ethylene production with purchase ethylene from FCC and manufactured HDPE and LDPE. The 1963 merger of the FCC and MISOL subsidiaries then produced a fully integrated operation.

Subsequent to the merger, Kemica operated profitably for the next two decades. Returns on Capital Employed (ROCE) averaged 22%, aided by tariffs in excess of 20% on imported polyethylene. Low cost feedstock also contributed significantly to Kemica's success.

These two conditions changed late in the 1980's. Both of Kemica's feedstock contracts were renegotiated, and while the new pricing formula remained cheaper than those prevalent along the Gulf Coast USA, the costs to Kemica were up 20% from the previous contracts. Even more important, Australia began to phase down its tariffs as part of GATT Trade Agreements. By 1998, the tariff on polyethylene had been lowered to 5%. As a result, Kemica's profitability fell. Throughout the 1990's, it earned single-digit ROCE's, except for the peak cycle year of 1995.

FCC and MISOL reacted to the decline in Kemica's performance by attempting to improve the operation's cost structure. Administrative overheads were reduced substantially. FCC's excellent furnace technology was applied to the steamcrackers to improve their yield. Most important, they supported Kemica's acquisition of Teuton Plastics, which rendered Kemica the country's sole HDPE producer. By mid-1997, these steps had repositioned Kemica to return to earning double-digit ROCE's.

FCC and MISOL's Decision to Exit

During the 1980's both FCC and MISOL entered larger-scale polyethylene joint ventures in Saudi Arabia. These operations, characterized by world scale facilities (crackers of 700-900 KTA) and the cheapest feedstock in the world, were widely believed to be the globe's most competitive operations. In response to high economic growth in South and South-East Asia and China, both companies later committed to major expansions of the Saudi ventures. In addition, FCC commenced a large-scale, grassroots polyethylene and alcohol venture in Singapore. Serving the growing Asian market with these facilities has now become the focus of FCC's and MISOL's respective polyethylene strategies. The Australian market, in relative terms, is viewed by FCC/MISOL as a small self-contained market. Consequently, both companies have resolved to divest of Kemica as no longer strategic to their Asian operations.

Management's Discussion of the Australian Market

Australia's GAP has been growing 3-4% annually during the 1995-97 period. Demand for HDPE typically grows at 1.5 x GDP, and has averaged 5.5% annual growth over the same period. Australia is expected to experience slower but still positive economic growth in 1998, despite the impact of the Asian crisis. HDPE demand is anticipated to grow at 3% over the next year. LDPE is projected to grow only at 1%.

The Australian polyethylene market operates as an "import parity market". Australian prices are set by prices in Southeast Asia, plus a differential reflecting transportation and Australia's 5% tariff. Typically, the import parity price is determined by adding \$A80-120/ton for shipping, handling plus tariff to the S.E. Asian price of polyethylene. Kemica is also able to change a premium over parity prices for security of supply and for making specific specialty grades sought by the market. On average, Kemica has realized a \$A 75/ton premium over import parity prices over the last 3 years.

Linear Low Density Polyethylene (LLDPE) is the third major type consumed in the Australian market. LLDPE demand has recently grown at about the same rate as HDPE. Australia has one domestic producer of LLDPE, which is Orca Pty. Ltd. Orca serves some 60% of the market, with imports accounting for the rest. Dow Chemical's Dowlex product has been especially well accepted by the films market. Kemica does not participate in the LLDPE market.

Kemica - Principal Considerations for Buyers

Kemica holds a strong market position in its principal HDPE product (80% market share) and has demonstrated it can command premium prices versus imports. LDPE production of 30KTA also commands premium prices and has consistently been profitable throughout the commodity cycle.

Kemica's feedstock costs are cheaper than average industry facilities in North America, Europe and Asia, but about \$20-30/ton more expensive than plants in Saudi Arabia. Net feedstock costs

for Kemica's naphtha cracker are especially attractive, due to the relatively high value achieved on co-product disposition.

Kemica's fixed cost structure shows higher unit costs than new and larger plants elsewhere. Recent rationalizations have removed about \$A 10M in annual costs. Synergies from the Teuton acquisition are expected to contribute another \$A13M in annual cost reductions and/or revenue enhancements. Further opportunities for rationalization exist, as Kemica's plant manning averages 50% higher on a unit basis than world scale plants elsewhere.

Kemica's complicated structure of multiple, small plants and local industrial relations present challenges to realizing further cost improvements. Kemica's plants were originally constructed 30-40 years ago. Continued infusions of technical innovations from FCC/MISOL have helped create attractive debottleneck expansion opportunities. Kemica's steamcrackers currently produce 200 KTA of ethylene and can be expanded to 225 KTA at a capital cost equal to 50% of grassroots investment. Opportunities also exist to improve the reliability of Kemica's plants. In each of the last 3 years, some 10-15 KTA of ethylene production was lost due to unplanned plant shutdowns. A more extensive minor project budget may eliminate most, if not all of these unplanned shutdowns.

Kemica continues to benefit from strong technology assistance from its shareholders. Kemica is entitled to participate in operational and applied research networks, and to receive improvements developed for processes already operated by Kemica. A purchaser of Kemica will be able to negotiate transitional Technological Assistance Agreements (TAA's) with FCC and MISOL for periods up to 5 years duration.

FCC and MISOL have also indicated that subsequent to a sale, they are prepared to extend Kemica a five year 'Non-Compete' agreement. Under such an agreement, neither FCC nor MISOL will sell any product into Australia so long as that product is made by Kemica. Both FCC and MISOL will execute distribution agreement establishing Kemica as their exclusive agent to import and sell FCC/MISOL products.

Attachment 2

**Kemica - Post-Teuton Acquisition
Pro Forma Cash Flow**

| <u>Key Bases</u> | O/L (1) | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| Australia GDP - % | 3.5 | 3.5 | 4.0 | 4.0 | 3.5 | 3.0 |
| HDPE Demand - % | 5.0 | 5.0 | 6.0 | 6.0 | 5.0 | 5.0 |
| S.E. Asia PE Price \$US/Ton | 800 | 750 | 700 | 900 | 1000 | 900 |
| HDPE Price - Australian \$A/ton \$US/\$A | 1218 .70 | 1146 .70 | 1075 .70 | 1275 .75 | 1408 .75 | 1275 .75 |
| \$US M | | | | | | |
| Revenues | 220 | 250 | 250 | 300 | 340 | 340 |
| Variable Cost | (120) | (125) | (125) | (135) | (140) | (140) |
| Fixed Cost | (50) | (40) | (38) | (37) | (35) | (35) |
| Gross Margin | 50 | 85 | 87 | 128 | 165 | 165 |
| Depreciation | (10) | (10) | (12) | (12) | (13) | (15) |
| Taxable Income | 40 | 75 | 75 | 116 | 152 | 150 |
| Tax | (14) | (27) | (27) | (40) | (53) | (52) |
| Net Income | 26 | 48 | 48 | 76 | 99 | 98 |
| Capex | (20) | (20) | (22) | (22) | (24) | (25) |
| Add Depreciation | 10 | 10 | 12 | 12 | 13 | 15 |
| Net Cash Flow | 16 | 38 | 38 | 66 | 88 | 88 |
| NOTE: EBITDA | 50 | 85 | 87 | 128 | 165 | 165 |

(1) Outlook for 1997, as of 11/97; includes 6 months Teutonic operations and \$10M merger - related costs

Attachment 3

**Kemica - 1997 Corporate Plan
Earnings/Cash Flow Outlook**

| <u>Key Bases</u> | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------------------------|-------|-------|-------|-------|-------|
| Australia GDP - % | 3.0 | 1.0 | 1.0 | 2.0 | 3.0 |
| HDPE Demand - % | 4.5 | 1.5 | 1.5 | 3.0 | 4.5 |
| S.E. Asia PE Price \$US/Ton | 500 | 400 | 500 | 650 | 900 |
| HDPE Price - Australian \$A/ton | 844 | 742 | 908 | 1075 | 1360 |
| \$US/\$A | .65 | .60 | .60 | .65 | .70 |
| | | | | | |
| \$US M | | | | | |
| Revenues | 200 | 180 | 205 | 240 | 300 |
| Variable Cost | (125) | (125) | (135) | (140) | (140) |
| Fixed Cost | (35) | (30) | (30) | (30) | (32) |
| Gross Margin | 40 | 25 | 40 | 70 | 128 |
| Depreciation | (10) | (12) | (12) | (13) | (15) |
| Taxable Income | 30 | 13 | 28 | 57 | 113 |
| Tax | (11) | (5) | (10) | (21) | (40) |
| Net Income | 19 | 8 | 18 | 36 | 73 |
| | | | | | |
| Capex | (20) | (22) | (22) | (24) | (25) |
| Add Depreciation | 10 | 12 | 12 | 13 | 15 |
| | | | | | |
| Net Cash Flow | 9 | (2) | 8 | 25 | 63 |
| | | | | | |
| NOTE: EBITDA | 40 | 25 | 40 | 70 | 128 |

August 15, 1997

Memorandum

To: Mr. Richard Farthing
From: J. C. Higgins
Subject: Orca as J.V. Partner

Recent contacts with Orca's Manager of Strategic Planning have identified an interest on Orca's part in a possible plastics Joint Venture with Kemica. This paper assesses the strengths and weaknesses of Orca's plastics division and the potential pros/cons of forming a joint venture.

Orca Plastics Facilities and Business

Compared with Kemica, Orca's Plastics facilities are simpler, more modern, and expandable at cheaper cost. Orca operates a single steamcracker, currently producing 260KTA of ethylene. This cracker was originally built in 1983 to process naphtha feedstock, but was completely revamped in 1995 to handle ethane. This revamp coincided with Orca constructing a 700KM ethane pipeline to South Australia and concluding a 10 year ethane supply contract. Orca spent some \$US 150M combined on these projects. Together, these projects repaired a major disadvantage Orca faced in feedstock costs. However, Orca's ethane supplies are still estimated to be \$A 10-20/ton higher cost than Kemica.

Assuming adequate ethane supplies, Orca's cracker could be cheaply expanded to 300KTA, and possibly higher. Orca has not undertaken this expansion because of its market position. Orca Plastics' principal product is Linear Low Density Polyethylene (LLDPE) and its market share is only 60% of Australia's domestic demand. Imports, especially from Dow Chemical, have more deeply penetrated Orca's market relative to Kemica's in HDPE. As a result, Orca has more production capacity than it can place in the domestic market. This year, Orca is exporting 35 KTA of ethylene and 40 KTA of LLDPE at prices roughly \$200/ton below domestic sales. These exports may suffer even worse prices over the year ahead as a result of Asia's economic problems. Like its steamcracker, Orca's LLDPE polyethylene reactor could be expanded economically. A first stage expansion of 30 KTA has already been developed by Orca. However, the project could not be economically justified based upon export prices. Orca also operates an older, high pressure facility which makes Low Density Polyethylene (LDPE). This facility manufactures about 80-85 KTL of LDPE, and unlike the other plant units, cannot be cheaply or easily expanded. Orca has about a 60% share of Australia's slow growing LDPE market. (i.e. 1% p.a. growth).

As a former subsidiary of an English multinational, Orca has only limited research facilities and "own" technology. How it supports its steamcracking operation technologically is unknown.

Orca receives only basic technology support for its polyethylene facilities under its license with Union Carbide (UCC). We estimate that Orca pays UCC some \$US 5M annually in royalties. This weak technology position will leave Orca Plastics increasingly vulnerable over time, as external manufacturers develop more advanced products, such as metallocene resins, and process improvements which enhance production while lowering unit costs.

Orca is known to have serious environmental issues associated with their site. In addition to the ethylene/polyethylene facilities, Orca also operates a chlorine plant on the site. Over time, residues from the plant have seeped into groundwater, some portion of which may have reached the nearby bay. Orca is known to be in close contact with the Australian Environmental Protection Agency (EPA) about this issue; several consultant studies have been carried out on the site at the direction of the EPA.

Orca Plastics Financial Performance

Orca Plastics' financial performance is something of a mystery. Prior to 1996, the Division operated on high cost naphtha feedstock. Published financials from 1995 show \$US 16M equivalent in net income and an ROCE of 10%. The plant was shut down for part of 1996 for the conversion to ethane and the year also included substantial one-time startup costs. Orca chose not to publish separate financials for Plastics that year, but brokerage reports estimate losses of \$5-10M.

Orca's fiscal year runs from April to March, so full year financials for Orca Plastics, on the new ethane feed basis, will not be available until March 1998. The Division made some \$US 20M equivalent of net income over the first six months. Performance during the second six months is expected to be adversely impacted by low export prices and deteriorating LLDPE prices inside Australia.

Orca Plastics Strategic Position - Merger Pros/Cons

Orca Plastics enter 1998 with a weak overall strategic position. While its plants are relatively modern and efficient, and its feedstock position greatly improved, the Division faces three serious weaknesses:

- 1) Technologically, it is an "orphan", fated to be a buyer of improvements developed by others, and/or to react to the innovations of others
- 2) Its market position in LLDPE is vulnerable to imports and its ability to compete in export markets is hampered by relatively high cost production and substantial Shipping costs.
- 3, Having recently spent substantial capital on the acquisition of an international Explosives business, Orca top management no longer seems committed to the plastics business.

Financially, Orca Plastics should perform worse than Kemica at the bottom of the polyethylene cycle. It could, however, perform substantially better at the top of the cycle, due to its easy ability to increase production when supplies are tight and prices high.

A merger with Orca Plastics would bring several strategic improvements to Kemica:

- 1) The J.V. would have leading market shares in all brands of polyethylene, i.e. 60-80% in LLDPE, LDPE and HDPE.
- 2) The J.V. would have a choice of expanding production at either the Kemica or Orca sites. This would provide negotiating leverage with feedstock suppliers.
- 3) Kemica should benefit from having access to Orca's marginal ethylene/PE production. Any of the exports which can be converted to domestic sales would constitute a major revenue enhancement.
- 4) Orca's facilities should benefit from access to FCC/MISOL technology. Operating processes can be enhanced and future royalty payments reduced. Enhanced products may help LLDPE sales displace imports.
- 5) Orca's recently modernized plants may provide a long term basis for low cost expansions to meet market growth.
- 6) Consolidating overheads should immediately reduce operating costs

However, FCC and MISOL will need to weigh carefully the environmental risks associated with Orca's facilities. They also will need to be prepared for Orca's business to suffer with the deteriorating market conditions in Asia. In the near term, Orca's performance could be a "lead weight" around any quick J.V. divestiture plans.

Attachment 5

Payne, Torture, Bennett, Style, Inc. Broker's "Alert" - Orca Plastics Impacted by Asian Crisis

Orca Party Ltd's bold strategy to revamp its business portfolio has received a jolt, (or is it a boost?) from the Asian crisis. After committing more than \$A250M to modernize and reposition its Plastics Division, Orca now faces the prospect of deteriorating market conditions at home and abroad. Polyethylene prices are plummeting in S. E. Asia. This is a direct concern to Orca who exports some 75KTA of ethylene/PE into the S.E. Asia market. Eventually, however, lower exterior prices find their way into Australia via cheaper imported product. Orca Plastics is especially vulnerable on this front as its key product, LLDPE, faces import competition currently equal to 40% of demand.

Based upon these developments, we are downgrading our outlook for Orca's Plastics Division and for Orca Pty. The following projections reflect our revised pricing outlook.

| \$USM | (1) 1998 | 1999 |
|---------------------|-------------|-----------|
| Revenues - domestic | 175 | 150 |
| Export | <u>50</u> | <u>25</u> |
| Total | 225 | 175 |
| Variable Cost | (125) | (125) |
| Fixed Costs | (25) | (25) |
| Gross Margin | 75 | 25 |
| Depreciation | (25) | (25) |
| Taxable Income | 50 | 0 |
| Tax | <u>(17)</u> | <u>-</u> |
| Net Income | 33 | 0 |

Results such as these are not likely to endear Plastics Division to the heart of Orca's new Managing Director, Phillip Ownoptions. Never a fan of Plastics, will the new outlook push Phil to make another dramatic strategic move? We think so, and after investing so much for so little return, the markets would probably applaud Orca acting decisively to stop the bleeding.

(1) Ending March 31, 1998

Attachment 6

Kemica/Orca Plastics Joint Study team
Potential Joint Venture Synergies - Summary

The Joint Study Team (JST) has examined the potential benefits of a Kemica/OP merger, as well as the one time costs and needed investments to capture synergies. Its finding is as follows:

Synergies - Annual Benefit

| \$AM | After 1 Year | After 3 Years |
|--|--------------|---------------|
| 1. Eliminate Duplicate Overhead | 10 | 15 |
| 2. Manufacture HDPE at Orca, reducing exports | 5 | 12 |
| 3. Consolidate Insurance | 6 | 6 |
| 4. Optimized Marketing & Logistics | 3 | 5 |
| 5. Enhanced Purchasing & Other | <u>2</u> | <u>4</u> |
| Sub-Total | 26 | 42 |

One Time Capital Savings

| | | |
|--|----|----|
| 1. Reduced working Capital from Consolidated Trade Terms and Inventory | 10 | 15 |
| 2. Lower Turnaround Costs | | 5 |

One Time Costs

| \$AM | |
|--------------------------|-----------------------|
| 1. Redundancy Payments | 15M over 3 years |
| 2. Relocation/Transition | 3M over 2 years |
| 3. Inventory Write-Off | 3M over 1 year |
| 4. New Name/Signage | 2M over 1 year |
| 5. New HDPE License | <u>2M over 1 year</u> |
| TOTAL | \$A 25M |

Needed Capital Investment \$AM

| | |
|----------------------------------|--------------|
| 1. PE Expansion at Orca for HDPE | \$12M |
| 2. Other Investments | <u>\$ 8M</u> |
| TOTAL | \$A 20M |

The above synergy estimates should be considered as very likely to be realized. They are readily within the J.V.'s control to achieve and have been conservatively estimated. The JST also sees considerable upside from the J.V.'s enhanced market position in all forms of Polyethylene. This may enable the J.V. to cross market grades not now sold to some customers. No credit has been taken for this in the above. Likewise, no credit has been taken for enhanced leverage in feedstock negotiations.

One time costs are also conservatively estimated and are unlikely to be exceeded. Capital expenditures however reflect scoping quality only. Further work will be needed there to produce appropriation quality estimates.

KEMICA (AUSTRALIA) – B

The FCC/MISOL meeting with Orca Pty. had been a fruitful one. All parties agreed that their Australian polyethylene operations were no longer strategic to their going-forward business plans. Thus, there was complete alignment that the parties saw benefit in combining their operations, enhancing value, and exiting the plastics business as soon as a good sale could be achieved. The prospective partners also agreed that the identified synergy potential for the joint venture was of interest. Graeme Honeywell of Orca later put it as follows to a financial reporter:

“There appears to be high confidence that annual savings of \$A35-40 M can be achieved, along with one-time capital economies. There also appears to be further upside to the identified savings, both tangible and intangible. The synergy teams have taken no credit for accomplishing workforce reductions within the unionized plant personnel; neither have they assumed much in the way of ‘best practices’ transfer among the two installations or of harmonization of policies on compensation and benefits. Becoming the sole manufacturer of polyethylene in Australia has got to be of assistance in the marketplace, but is not reflected as a material synergy. In this and other ways as well, the joint venture will create value for its shareholders, who are unusually unified in terms of having common objectives.”

For Kurt Robinson, the synergy prize seemed attractive enough, assuming it was realistically quantified and would not be eroded by unidentified costs. Kurt was also fundamentally impressed that the ACCC, the anti-monopolies commission in Australia, would allow such a combination in the first place. Resulting market shares of 60-80% would almost certainly prevent a U.S. merger from being consummated. Thus, he endorsed FCC/MISOL and Orca taking the next steps towards negotiating a merger. Before adjourning, the three prospective partners agreed to:

- ◆ Have teams meet in one month’s time to negotiate proposed shares in the JV
- ◆ Exchange data under confidentiality agreement, so as to enable the teams to prepare valuations
- ◆ Have Orca approach the ACCC to begin verifying that the combination would be allowed

Finally, the parties agreed that, in addition to historical information, they would exchange their most recent “approved business plan”, with these having 5-year forward financial projections for Kemica and Orca Plastics respectively. A brief announcement text was prepared, indicating that the parties were in negotiations on a joint venture, and the Hawaiian Island of Maui was set as the venue for the teams’ meeting.

The Next Month

FCC/MISOL addressed the question of what constituted Kemica's "approved business plan". In the end, they decided to give Orca the Corporate Plan Kemica had submitted in September 1997. It was an approved business plan, in the sense that Kemica's shareholders had not requested material revisions. However, its proposed capital spending was not definitively approved. FCC/MISOL only take such actions through a separate budgeting and appropriation process. Moreover, neither FCC nor MISOL traditionally devoted significant attention to testing the integrity and robustness of Kemica's production or marketing plans. Typically, the shareholders looked at the financial forecast and the company's cost structure, confining its guidance to expressions of satisfaction or dissatisfaction with progress on these dimensions. Approval or disapproval of capital spending was then influenced by perceptions of whether Kemica was responding to shareholder guidance.

Orca provided FCC/MISOL with its five-year plan for Orca Plastics. How this plan had been put together and the robustness of Orca's planning process were unknowns to FCC/MISOL. In an effort to minimize the risk of the two plans being composed on different bases, Kemica's shareholders proposed, and Orca agreed, to use only the production, sales volume, operating costs, and capital spending projections from the exchanged data. To provide prices for both sales and purchased feedstocks, the prospective partners turned to ChemSystems, a consulting firm which prepares a variety of price forecasts for chemical businesses. They further agreed to run several cases with different price forecast assumptions and residual values. The agreed cases were:

1. "Trendline" ChemSystems PE prices for S.E. Asia + \$A200/ton differential into Australia, with residual value = 5 times year 5 net cash flow. Trendline prices reflect an average for PE relative to both the peaks and troughs of this cyclical business
2. Same as Case 1, with residual value = 5 times average cash flow for years 3-5
3. Prices constant at average 1997 levels with no residual value

In FCC's mind, it was important to look at the performance of Kemica and Orca Plastics under different conditions. Correct valuation was not the objective. Correct relative valuation was the goal, as respective shares in the JV would be the outcome determined. Thus, FCC insisted on one final case, a "cyclical" case which would test how Orca's business, with its substantial exports, would fare under the immediate impact of the Asian crisis. PE prices for the last "cycle bottom", which occurred in 1993, were to be assumed for 1998-99, with only a gradual recovery thereafter. Residual value would be the same as Case 1.

Shortly before the negotiators were to convene, Graeme Honeywell talked with financial reporters in Melbourne. Orca's stock had been under pressure and Graeme was questioned on the firm's plans to boost results. Graeme then commented:

Orca will continue to realign its portfolio toward businesses in which it has a fundamental competitive advantage. We will become a global company, not just an Australian manufacturer. Our explosives acquisition makes us the global leader in this business. We aim to achieve a comparable position in other lines, such as paints. Businesses that do not fit this profile will be aggressively restructured and/or divested. Our recent Vinyl's JV is one example, and we will soon embark on another such effort in Plastics. Restructuring these non-strategic businesses will provide additional cash to help maintain our A- debt rating while we pursue further acquisitions.

Meeting in Maui

Before sitting down with the Orca team, Steve Josephs of FCC and his colleagues examined the results of the four prepared valuation cases (Attachment 1). Steve was somewhat surprised at the high absolute values they produced for the two separate businesses. Synergies were not yet a part of the analysis. The range of relative outcomes was also fairly “tight”. Steve felt his team needed to evaluate whether the data was a good basis for negotiation and if so, set some negotiating objectives.

“I’m surprised the values are so high. Kemica certainly hasn’t performed like this recently. Our cases imply that Kemica’s operating reliability issues disappear, that it achieves a very economical expansion and holds its 80% market share in HDPE in the face of imports stimulated by Asia’s crisis. However, the values may be high in both cases, so the relative relationship may be ok. I’m also surprised that the “low cycle” case doesn’t produce more of a negative impact on Orca and thus more variation. That said the data appears credible enough that it will provide at least a basis for beginning discussions.”

Marcus Sternly of MISOL then added:

“Let’s also remember that we bring additional value to the table. FCC and MISOL can bring technology, which Orca cannot provide. Much of the synergies involve migrating Kemica know-how to Orca’s plants. Orca’s business will be exposed to our new plants if they don’t enter this JV and secure a “non-compete” from FCC and MISOL. Orca’s management is strongly signaling its stock market that it intends to make a move to restructure or divest Plastics. Finally, Kemica is a stand-alone entity, which has the services to provide the structure for the JV’s operation. Orca Plastics, as a division, has no separate services and cannot form the core of the JV. Consequently, Kemica provides the basis for accomplishing the headcount reduction synergies”

“That’s well and good” replied Steve Josephs. “However, we can expect to hear about how old and unreliable are Kemica’s plants, how new and expandable are Orca’s, and how Kemica’s ethane contract comes up for renewal in one year. So, given all this, what’s our opening position on relative shares in the JV, and where would we be willing to close? Also, how should synergies be reflected in the valuation and determination of relative shares?”

POTENTIAL KEMICA/ORCA PLASTICS JV – VALUATION CASES & SYNERGIES

CASE 1 – ChemSystems “Trendline” Pricing; Residual Value at 5X Year 5 Cash Flow

| | | |
|--------|-----|------------|
| KEMICA | \$A | 330 M |
| ORCA | | <u>320</u> |
| TOTAL | | 650 |

CASE 2 - “Trendline” Pricing; Residual Value at 5X Average Cash Flow for Years 3-5

| | | |
|--------|-----|------------|
| KEMICA | \$A | 300 M |
| ORCA | | <u>277</u> |
| TOTAL | | 577 |

CASE 3 – “Constant ‘97” Pricing; No Residual Value

| | | |
|--------|-----|------------|
| KEMICA | \$A | 200 M |
| ORCA | | <u>177</u> |
| TOTAL | | 377 |

CASE 4 – “Bottom Cycle” Pricing; Residual Value at 5X Year 5 Cash Flow

| | | |
|--------|-----|------------|
| KEMICA | \$A | 310 M |
| ORCA | | <u>254</u> |
| TOTAL | | 564 |

MEMO:
Agreed Synergies for Valuation Purposes

| \$AM | After 3 Years |
|--|---------------|
| 1. Eliminate Duplicate Overhead | 12 |
| 2. Manufacture HDPE at Orca, reducing exports | 11 |
| 3. Consolidate Insurance | 5 |
| 4. Optimized Marketing & Logistics | 5 |
| 5. Enhanced Purchasing & Other | <u>4</u> |
| Total | 37 |

KEMICA - C

After two meetings in Maui, negotiations for FCC/MISOL and Orca achieved an Agreement in Principle to merger Kemica and Orca Plastics. Major elements of the Agreement included:

- FCC/MISOL collectively would own a 53% economic interest in the venture, with Orca owning the remaining 47%.
- FCC/MISOL would receive 50% of the Board of Directors positions with Orca also controlling 50% of the Board seats.
- The Partners agreed that all important matters reserved for Board of Directors decision would require unanimous consent of the Directors.
- Disputes among the Partners on important matters would, after a stated period of time, be settled via forcing a sale of the Venture to new owners.
- An 'Initial Business Plan' (IBP) was agreed upon, including four years capital spending program. This Plan and the associated capital spending could be altered by unanimous consent of the Partners, but otherwise would be implemented even if the Partners were to disagree on some or all of it in the future.
- The Partners agreed that each would retain liability for environmental issues at their respective pre-merger sites.

Senior managements at FCC, MISOL and Orca ratified this Agreement in Principle and directed the negotiating teams to devise detailed merger documents, carry out due diligence, and close the J.V. before year-end 1998. Based upon this consensus, the Partners prepared a press release and announced in May their intention to form a joint venture.

The Next Three Months

During June-August, parallel activities unfolded. The negotiating teams, now joined by attorneys, labored to fashion a merger agreement, joint venture agreement, environmental deed and ancillary documents necessary to launch the J.V. Clearance for the transaction was secured from ACCC. Kemica focused on making preparations to implement the venture. This included identifying a venture management team, planning for the migration of Orca personnel to Kemica's organization, and preparing to service Orca Plastics' customers using Kemica's systems and supply chain. Kemica also launched an effort to devise a new name for the J.V., and landed on the name "**Croesus** Ltd."

Orca concentrated its energies on conducting due diligence of Kemica. Orca accountants and engineers examined Kemica's financial statements and facilities. Subsequently, Orca's chief negotiator, Perry Keats, contacted Steve Josephs with the following message:

"From an Orca perspective, we are greatly concerned that the negotiated split of economic interests is not fair and equitable, given more concrete information obtained from due diligence. In fact, the split should be 55/45 in Orca's favor. We have looked at the historical reliability of Kemica's plants, and production performance averages 85% of steamcracking capacity versus

the 93% assumed in your valuation model. Our engineers doubt Kemica can stretch its polyethylene reactors to 225 KTA without substantially more investment than assumed. Third, we think your feedstock costs are understated. Kemica also has its ethane contract expiring next year. Clearly it is exposed to price increases from its suppliers. Kemica's pension fund is also under funded and contributions will need to be resumed. Finally, some of your minor business lines, for example polypropylene, are projected to have very robust performance relative to what was actually achieved historically. Correcting for these distortions, economic shares swing to 55% in Orca's favor. I'm faxing you, as we speak, a reconciliation documenting this corrected basis (Attachment 1)."

"That's not going to happen" responded Steve Josephs. "Our deal was concluded at 53/47 in favor of FCC/MISOL, and that's where we have authorization to do the venture. Due diligence is supposed to be about facts and verifiable discrepancies, such as 'do you operate the steamcracker you claim to own'; it's not about Orca's 'opinion' of our established programs addressing Kemica's reliability or our ability to execute capital projects on budget. So, I don't accept any of your assertions. Our deal, as negotiated, still stands."

"I hear you", replied Perry, "but do not accept that our agreement earlier this year is not influenced by these due diligence findings. Your valuation cases were greatly exaggerated. Orca requires a valuation adjustment."

The discussion ended at that point. Over the next two months, FCC/MISOL and Orca traded further due diligence discussion points; FCC/MISOL cited particular concerns which they had regarding Orca plastics, especially its exposure to Asian markets and imports. Orca continued to press its points about Kemica's reliability while claiming additional variable costs savings. By end-September, the discussion had narrowed somewhat. Orca focused its efforts on achieving a 50/50 economic split of the J.V. FCC and MISOL continued to insist on the original deal, 53/47. The Kemica shareholder had, by now, developed specific counters to Orca's due diligence claims (Attachment 2). They had, however made one concession, agreeing to 'indemnify' Orca's against higher feedstock costs remitting from the renegotiations of Kemica's ethane.

Other than this issue, closure had been reached on virtually all merger issues. Draft merger agreements were in an advanced state of preparedness. Assuming the economic share dispute could be resolve, a closing for the merger was expected in the fourth quarter.

End-September 1998

On September 26, Steve Josephs received a call from George Cahill, Manufacturing Vice-President at Kemica:

"Bad news, Steve. There's been an explosion at one of the three gas plants, which extracts ethane for supply to Kemica. Our supplies are going to be impacted. It is early days, but our best estimate is a loss of 20-30 KT of ethylene/PE production. Obviously, we've got only sketchy information from the gas supply companies. It's anybody's guess when full supply can be restored."

Two days later, Steve received a call from Perry Keats:

"I'm calling to see if you have any quantification of the impacts of the supply outage. The venture cannot go forward until this impact is measured and factored into determination of the economic split. Based upon rough estimates we've made using press reports, Orca sees the venture split now 55/45% in Orca's favor."

"Well Perry, FCC and MISOL are clear about where the starting point for the discussion resides. We start at 53/47 in FCC/MISOL's favor. In regards to the ethane supply disruption, let us get some more facts from our suppliers and we'll come back to you."

Steve then called George Cahill for an update on the supply disruption. The basic message was that the 20-30 KT annual impact still looked like the right range, with some potential for optimizing efforts to drive the result toward the lower end of the range. Timing of full supply restoration was still largely unknown. An update from the suppliers would probably come no sooner than January 1999.

