



INTERNAL CORRESPONDENCE

METALS DIVISION

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To (Name) Mr. G. M. Lincoln
 Division UCC-Metals Division
 Location Robinson Plaza II - Route 60
 Pittsburgh, PA 15205

Date July 27, 1982
 Originating Dept. "Calidria" Asbestos

Answering letter date

Copy to G. L. Dickson F. J. Shortsleeve
 B. L. Ingalls W. C. Thurber
 J. L. Myers J. E. Walsh
 T. P. Norris File

Subject Trip to Hong Kong & Japan
 with T. P. Norris - 6/17 - 7/8/82

F-5

Attached are copies of call reports by Tomoe Engineering personnel covering joint customer calls made in Japan with T. P. Norris and me, and the reports written by Tom. The following are my notes on subject trip.

Hong Kong

We visited UCE, Ltd., in Hong Kong on June 21, 1982. We met, primarily with M. G. (Mike) Skelsey and J. F. (John) Goudey, vice president & director, business research, respectively. We also met briefly with J. B. (Jim) Law, managing director, and W. A. (Bill) Farrell, business director, trading.

Our discussions centered on coverage of asian markets and the potential for asbestos sales in that area. Skelsey said they had never been requested to cover the sales area and had no idea of what the sales potential might be. John Goudey will run a "thumb nail" survey of the potential and report to us by the end of August. With that information we can better judge who should cover the area. We told UCE we were very pleased with the work of Tomoe in Japan and were leaning toward having them cover all of asia for us. UCE has reservations about Tomoe's ability to operate outside Japan and feel that they will probably use other small trading companies to get adequate coverage. That, to me, sounds fine as long as they do get the coverage (and I believe they will). Our decision was to delay making a choice between UCE and Tomoe until we have seen the results of the survey.

JAPAN

Tom was quickly inducted into the sales brotherhood of Japan as we were continually barraged with requests for immediate price reductions and with comments on the negative effects of asbestos "toxicology". Our conclusion was that some price relief should be provided because of competitive pressures and that the health issue probably will have a small effect on business but should diminish with time.

At our initial meeting with Tomoe our agenda included the following:

1. Canadian asbestos pricing
2. Flexible containerization of HPP
3. Weight standards and variation in our packaging
4. Cause of "hard pellets" in SG-100
5. Export sales situation
6. Callasbestos
7. New applications

Briefly our discussions were as follows:

1. Canadian pricing - we confirmed Tomoe's information that there has been no price increase for over one year and that producers are selling below schedule to many customers. The same condition prevails in Japan and results in extreme pressure for price concessions.
2. Flexible containerization - we agreed that Tomoe and their customer (primarily Matsushita) should work out details of their requirements and we would try to comply at King City. This appears to be one way to deliver pellet products at minimum cost.
3. Weight standards & variations - we agreed to get target net weights and limits for bag product sold to Tomoe. Subsequent to our discussion J. L. Myers supplied the information and Tomoe cannot understand the necessity for a 2# plus or minus variation for all our bag weights. They have received "many" complaints of bag weight variation, many are more than 2 #. They have supplied documentation of complaints, about 3 over the past 18 months. We will issue a credit memo for \$3015.00 to cover extra costs incurred. Frankly, I cannot understand why this is allowed to continue either, although we told Tomoe we did not see any early solution to their problem.
4. "Hard pellets" in SG-100 - Nittobo complained of hard pellets in SG-100 which turned out to be rock particles. These occurred at about the time of a tank failure at King City so we explained our mechanical problems to Tomoe. They accepted our assurance that the problem has been corrected and they should have no re-occurrences in the future. A credit memo has been issued for \$726.00 for replacement product.
5. Export sales - we explained that our export sales were currently at about 125% of budget and congratulated them for their part in this good performance. They felt that they would be slightly above, but not 25%, at the end of the year.
6. Callasbestos - Tomoe recalled that we had discussed subject last November. After their memories were refreshed they requested a sample which Tom Norris will provide.

7. New applications - Tom Norris reviewed his activities to date on the fiber blend product and possible applications thereof and on lubricating greases. Tomoe is most eager to learn of new applications and we agreed to send them a copy of the W. R. Grace brochure on European applications and markets.

We discussed also the possible loss of Hitachi Chemical, Tomoe's largest RG-244 customer. Recently Aerosil has lowered their price, probably to drive Cabosil out of Japan. Hitachi, however, has indicated they will switch from RG-244 to Aerosil to save money. Tomoe requested a reduction of 10¢/lb. on RG-244 for sale to Hitachi for up to 4 months. They feel that by then the Aerosil price will have gone back up and they will have retained the Hitachi business. The loss in NIFS would be \$2400. I tentatively agreed to their request subject to approval by W. C. Thurber.

We also discussed, at length, sales coverage of Asia. Tomoe had developed some information, through Shinwa Trading Co., on Thailand and Singapore. We scheduled a visit to talk to Shinwa and a detailed call report has been submitted by T. P. Norris. Tomoe was much better prepared for this discussion than was UCE in Hong Kong which reinforced my leaning towards Tomoe as the potential sales agent for all of Asia.

Our joint sales calls made with Tomoe between 6/22 and 7/6/82 are covered in detail in T. P. Norris' call reports dated July 12, 1982 and those by Tomoe personnel which are attached. The calls at Matsushita who uses HPP for ceiling tile and Nozawa, SG-100 for asbestos-cement panels, are worthy of note.

Matsushita currently buys about 1000 T/year of HPP and has a new wall board product which will require additional volume as the Japanese economy picks up. They presented us a "strong request" to lower our price 30% for all HPP used in their export product, 60% of their total. We agreed to present the idea to our management, but offered little hope for approval. We suggested more economical packaging or shipping as the best way to get a lower delivered cost. They asked about an HPP-type product with slightly lower specs which might be lower in cost and we agreed to check the possibility.

At Nozawa we were met with a barrage of data on asbestos prices throughout the world - they currently use SG-100 blended with a Russian equivalent of Grade 5. Nozawa can afford to pay extra for SG-100 only because the Russian product is so low in price. We were told that any further increase in SG-100 price would result in its replacement with Canadian asbestos. I assured them we were doing everything we can to keep our prices as low as possible. Also of note, Tomoe has 4 other prospective customers evaluating SG-100 in similar products. These include Showa Denko, Tokai Co., Japan Cement and Mitsubishi Cement. Their aggregate total usage would be at least as large as Nozawa (currently 2600 TPY). It will probably be 1-2 years before this potential can become actual sales.

Concern over asbestos-health questions is serious in Japan and will probably result in some loss of business. However, Tomoe predicts about 10% increase in sales volume in 1983, about 5% in sales dollars. We were convinced that pricing, especially over the next 6 - 12 months while the economy is trying to recover, is especially critical. We will probably experience difficulty implementing price increases for 1983, particularly for SG-100, AS-200 and HPP.

REB:dac
Encs.


R. E. Byrne, Jr.

UCC 004743

Mr. G. M. Lincoln
UCC-Metals Division
Robinson Plaza II-Route 60
Pittsburgh, PA 15205

July 12, 1982

"Calidria" Asbestos

Messrs.

R. E. Byrne
G. L. Dickson
B. L. Ingalls
J. L. Myers

F. J. Shortsleeve
W. C. Thurber
J. E. Walsh

Trip Reports for Hong Kong
& Japan - 6/17 - 7/6/81
T. P. Norris

REPORT OF CALL - HONG KONG

6/21/82

UNION CARBIDE EASTERN, INC.

New World Tower

Hong Kong

Met with - Jim Law - Managing Director
M. A. Skelsey - Vice President
W. A. Farrell - Business Director, Trading
J. F. Goudey - Director, Business Research
P. N. Woo - Business Manager, Latex

Union Carbide, Hong Kong, directs the marketing efforts of 152 exempt personnel in the following countries: Japan, Korea, Taiwan, Philippines, Thailand, Singapore, Malaysia, Indonesia, Australia, New Zealand, India and Sri Lanka. Combined 1981 sales approximate \$400 million. Copies of above data attached.

We discussed, in general terms, the "Calidria" business, and how with the exception of sales to Japan, Australia and small amounts to Taiwan, sales to the other countries were non-existent. We commented that with the recent emergence of Korea as an industrial and productive power, and an awareness that Japan's high labor cost was forcing manufacturing and construction operations to lower labor and production cost nation's markets for our unique asbestos grades should exist. We wished to discuss with their office the possibility that we explore these markets together; jointly develop the potentials or lacking that cooperation, we would ask Tomoe Engineering, our distributor in Japan, to take over selected countries to develop and service the potential businesses. Also, with Hong Kong being the back door to the Peoples Republic of China, a potential market of undefined size may also exist. The Hong Kong office is said to have excellent contacts with knowledgeable officials within the PRC.

We discussed our lack of success where C&P handled direct sales of "Calidria" in the U.S. We felt that the technical nature of our selling efforts, the necessity to develop markets and the small size of the orders provided a negative environment for sales personnel of C&P. Also, the general commodity nature of their business almost precluded its failure in selling the generally small "Calidria" orders.

Mike Skelsey agreed that the potential markets were undefined and that before a decision was made to either proceed with direct sales by U.C.C. or relinquish the markets for possible coverage by Tomoe Engineering a "quick look" research project would be conducted by John Goudey. Budgeted cost for the project would come under the Hong Kong office and results could be expected sometime in September 1982. REB is to confirm with John Goudey the nature of the information requested which in general would cover potentials in floor tile, automotive and construction markets.

At lunch, Jim Law commented that due to the specialized nature of our business (technical selling, etc), should the Business Research survey prove positive, that a reasonable market exist for our asbestos, that we might consider sending one of our own people to Hong Kong for a brief stay and direct the day to day selling effort; maintain the proper pressure on the U.C.C. personnel; and solve the traditional problems that may arise as new markets and customers develop. Other U.C.C. Divisions have tried this approach with moderate amounts of success.

Mr. Farrell discussed that should a market exist for our products, that in general we would be far ahead if those markets (countries) were covered by local distributors and managed by the local U.C.C. office. We agreed that our interest would best be served under such an arrangement.

Based on positive results from the Business Research Department that a reasonable market exists for our products, we would, at their request, present a seminar for their field personnel in the 1st Quarter, 1983.

In summary, the meeting went well. We stand to gain a Business Research evaluation of potential markets and should we elect to stay with direct or partial U.C.C. representation, our contacts made this date should prove most valuable especially as they relate to PRC.

J. P. N.

UCE TRADING AFFILIATES ORGANIZATIONS

Type of Sales

SLSMN

	US\$ MM 1981 SALES	EXEM PERS	100% UCC	DIV OF MFG Co.	BULK FAC	WHSE	STK	IND
JAPAN	109 60	12	•					•
KOREA	33	10	•					•
TAIWAN	37	12	•					•
HONG KONG (PRC)	63	39	•		•	•	•	•
PHILIPPINES	18	12	•	•	•	•	•	•
THAILAND	15	11	•		X	•	•	
SINGAPORE	26	11	•		•	•	•	•
MALAYSIA	12	11	•			•	•	•
INDONESIA	19	5	—					•
OTHERS (SEA)	3	1	—					•
AUSTRALIA	29	14	60% JV *	•	•	•	•	•
NEW ZEALAND	15	9	60% JV	•		•	•	•
INDIA	5	3	50% JV	•				•
SRI LANKA	2	2	60% JV	•				•

OVER 2 BILLION PEOPLE

18 COUNTRIES

US\$386 MILLION SALES

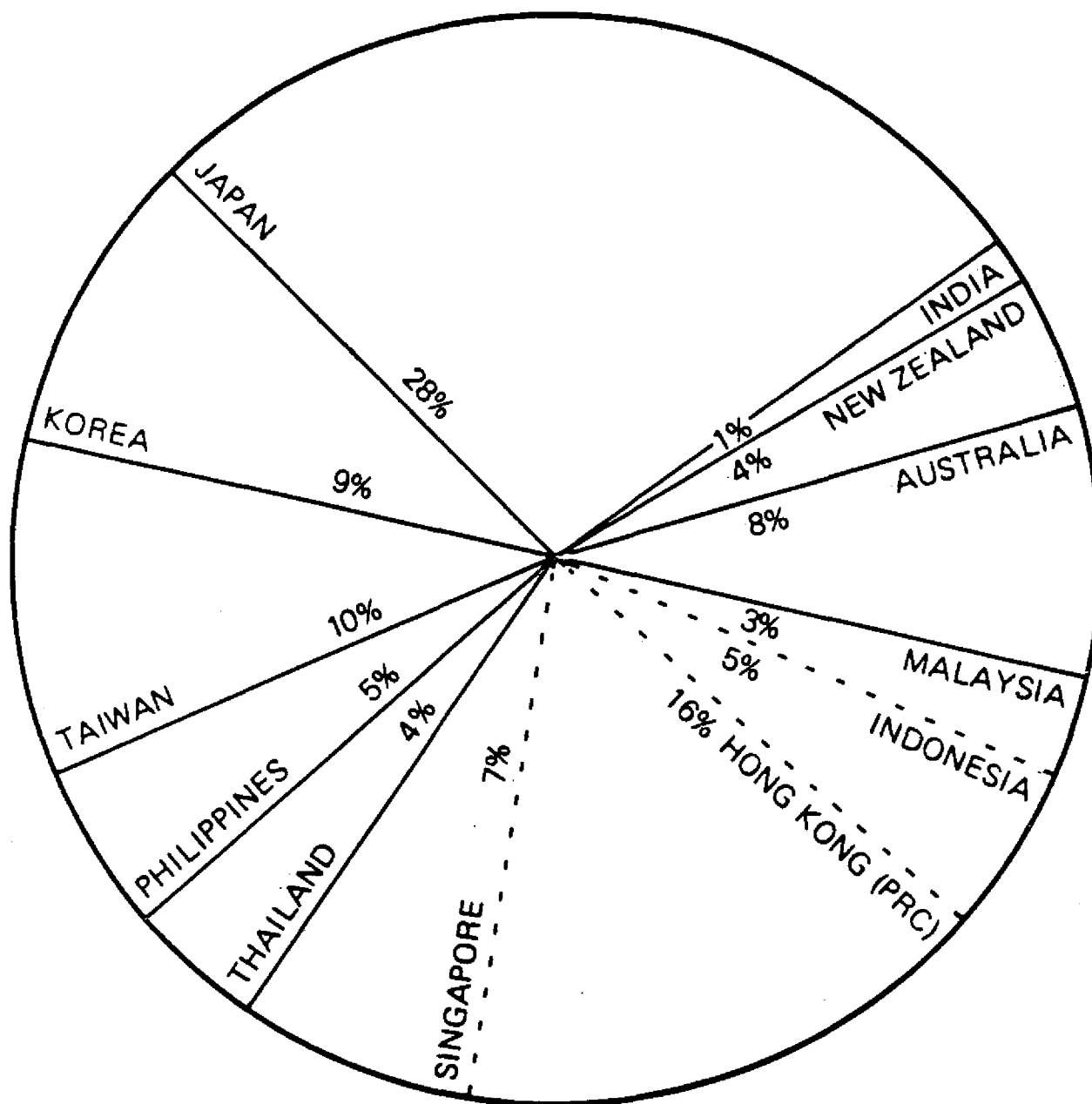
152 EXEMPT PERSONNEL

* - minority interest companies

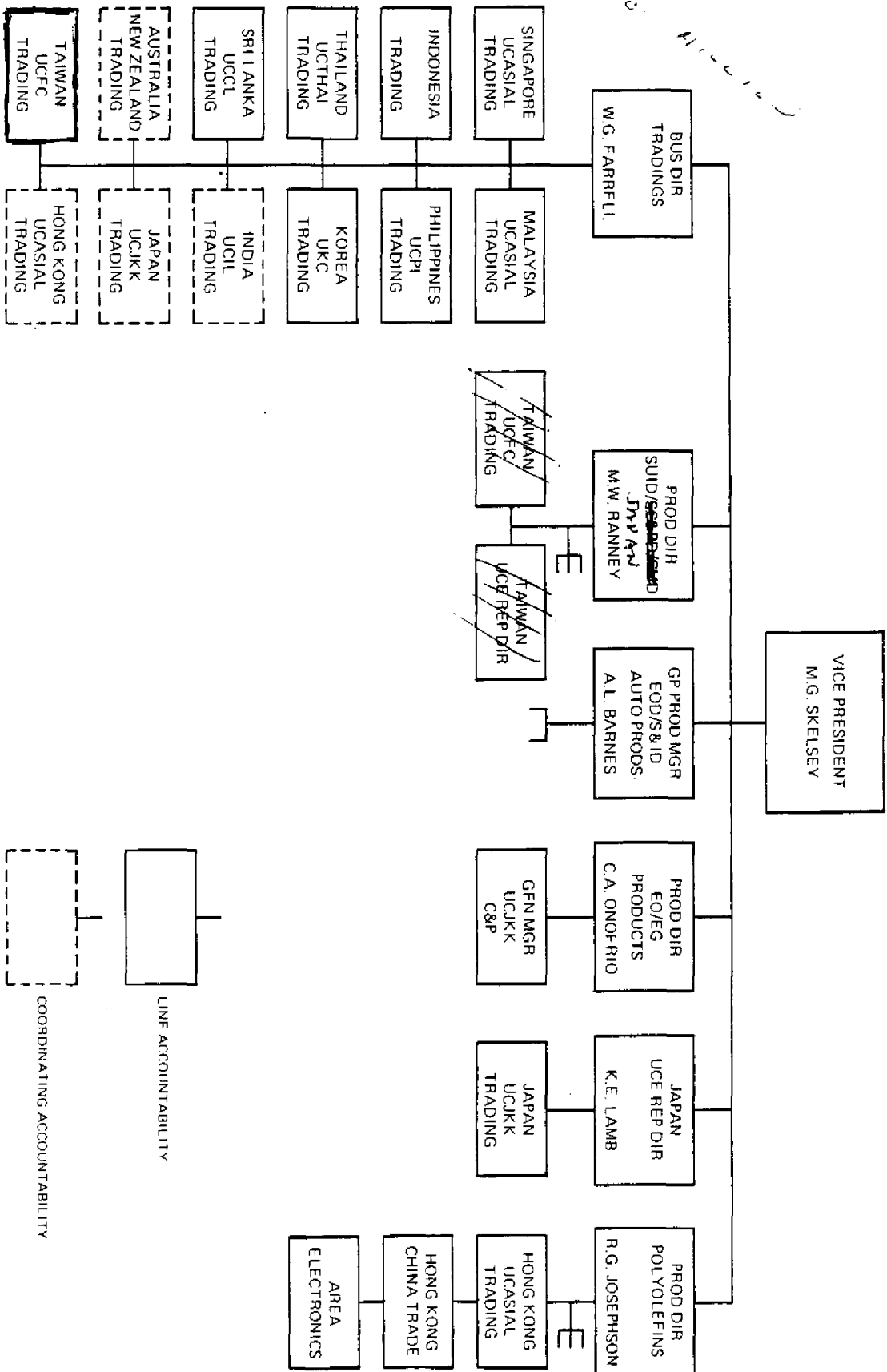
UCE 1981 TRADING SALES

VG-III

BY COUNTRY



TOTAL SALES: US\$386 MILLION



REPORTS OF CALLS - JAPAN

Tokyo, Japan

6/23/82

TOMOE ENGINEERING CO., LTD.

Met with - J. Uchiyama - Interpreter
 J. Endo - Sales
 T. Mito - Sales
 M. Kanno - Director
 Y. Kuga - Mgr. Inorganic Chemicals
 H. Shiraishi - Sales
 C. Ishida - Sales
 M. Honma - Sales
 H. Fukuma - Sales Manager

TEC - Sales from 1978

<u>Year</u>	<u>Amount</u>
1978	\$1,398,000
1979	1,632,000
1980	1,761,000
1981	1,806,500
1982	1,805,500 (estimate)

Total for 1982 to date is \$934,504, including
 order for June shipment.

1983 Estimate

<u>Grade</u>	<u>Quantity, T</u>	<u>\$</u>
SG-100	3,200	480 M
AS-200	960	180
HPP	1,080	257
HPO	300	86
SG-130	36	8
RG-144	240	196
RG-244	154	543
T-135	34	29
Telvis	300	103
	6,304 (Metric)	\$1,882 M
	6,934 (U.S.)	

This opening all day meeting with Tomoe was to discuss and attempt to solve past and existing problems. Also, a review on an account by account basis, highlighting the accounts areas of interest so that at our meetings surprise would be kept to a minimum. Our business climate in Japan can best be described as a "mixed can of worms". Feelings run from encouragement and optimism to despair and pessimism. Both sides will be reported and individual call reports are attached.

In general with Tomoe, the issues of price and environmental problems were most discussed. Customers have been requesting price relief either in the form of a price freeze, roll back to 1981 prices or a lower cost grade with the same performance characteristics. Especially during this period of a strong dollar and weak yen; Canadian asbestos over capacity, high inventories and 1981 prices discounted to large customer and Russian asbestos available at unknown price, all produced for Tomoe an atmosphere that our pricing was going to be a very sensitive issue.

Although the individual call reports will cover these areas in greater detail, the following specific points relative to pricing need to be emphasized:

1. Hitachi Chemical - Polyester Producer

Tomoe reports that RG-244 pricing relative to Aer-O-Sil is critical. They have not been able to implement January 1982 price increase and with the yen at 256/dollar are losing money on sales to this customer. Aer-O-Sil employs flexible pricing to account for changes in value of the yen and to control its market. In fact, in a recent price war with Cab-O-Sil, Aer-O-Sil continued to reduce its price until Cabot withdrew from the Japanese market. Reports are that Cab-O-Sil pulled out of Japan in February, 1982. It should also be reported that Aer-O-Sil is produced locally and Cab-O-Sil is shipped from Illinois. Tomoe ask us to provide special pricing for Hitachi Chemical; reduce the 1982 price to the 1981 level for a period of at least four months and to reconsider any possible 1983 price increase in view of weak yen (currently at 256 yen/dollar, favorable yen 220/dollar).

We must also be aware of a possible price war with Aer-O-Sil. Aer-O-Sil sells approximately 80 tons/month with most of that going into the polyester market.

2. Nozawa Co. - Asbestos Cement Sheet

They are Tomoe's largest customer in terms of tons (SG-100 - 2600 tons/year) and represent also their largest potential (10,000 tons/year by 1987). Nozawa have accepted the 1982 price and requested we not raise

the price in 1983. To back up this statement they compared asbestos producer prices from Africa, Canada, U.S.A. and U.S.S.R. (Currently buying U.S.S.R. Grade 5 and blending with SG-100). They are aware of asbestos overcapacity and high inventories which are being reflected in a freeze on prices and discounts to large users.

The asbestos cement sheet producers, in addition to Nozawa Co., include:

- A. Showa Denko -
Currently evaluating SG-100. 200 tons/month potential.
- B. Mitsubishi Cement -
Tried to replace Carey 7M but failed strength test. Have asked for additional samples.
- C. Japan Concrete -
Sampled with SG-100. Testing underway.
- D. Tokai Asbestos -
Working with Nozawa Co., who have supplied them with information on blending Russian Grade 5 with SG-100.

The above four companies represent a considerable actual and potential market for SG-100. Although they are all located in Japan, it is assumed that other similar potentials exist in Southeast Asia, and as the building market rebounds this market growth will also. For example Showa Denko shows a growth rate of 10% year, and this growth in spite of a depressed housing market.

With the size of this potential market and the fact that price will play an important role in customer acceptance, it would be appropriate if we were to consider developing a special grade below that of SG-100. The Filler Grade, discontinued in the late 1960's, would be a good place to start.

T.P.N.

Osaka, Japan

6/28/82

KISHU PAPER

Met with - Mr. A. Youealies, Product Department

This is a large paper company, and the application is for the use of T-135 in the production of paper sheet, which is layered by lamination to form a "FORMICA" like top for use on desks, tables, etc. It is hoped that the T-135 will improve opacity and retention of Clay and TiO_2 . At present they use 100 tons/month of TiO_2 . If successful T-135 would be added at a rate of 2% by weight. For better compatibility with their present TiO_2 ; we will send sample of CG-135 and advise on price. Until evaluations are complete the potential for T-135 is unknown.

Tokyo, Japan

6/24/82

^T
NITO BOSEKI CO.

Met with - Mr. K. Tsude - Production Control
- Mr. N. Oribe - Material Processing

They are using about 65 tons/month of SG-100 in Vinyl Asbestos Floor Tile. They are aware of the changes in our domestic floor tile producers switching to asbestos-free tile. In that regard we were asked if we supplied a substitute for asbestos. We replied negatively, and they indicated their own interest in producing asbestos-free tile.

At one time they used HPP in ceiling tile, but stopped because of environmental problems. We inquired what chances there were to again use HPP in that application. They replied - ZERO - as the equipment has been dismantled and sold.

About 1 ton/month HPO is used in a Rockwool Spray application.

They also inquired into the recent impurities found in SG-100. REB commented that one of our large wooden settling tanks had ruptured causing some amount of problem but that it had been rebuilt and they should not experience similar problems. However, they still experience minor impurities, but feel that our overall record of one serious problem in three years was not bad.

Because of the problems caused by the impurities in the SG-100 we agreed to a credit of \$690.80. This credit covers freight, in-out charges and the replacement of 842 bags of SG-100. Tomoe request for credit attached.

Osaka, Japan

6/28/82

DAINIPPON PAINT

Met with - Mr. Y. Tahara, Technical Manager
Mr. T. Takeda, Chief Engineer
Mr. N. Kusumoto, Section Manager

At present small amounts of RG-244 are used in an epoxy paint application. They intend to look at HPO in an acrylic emulsion paint. Both HPO and RG-244 are avoided in spray applications, and replaced with Mini-Fibers. Comparative data on RG-144, RG-244 versus Mini-Fibers has been requested. We promised to send whatever data we have available. We were also advised that HPO could replace KC Flock, which is reported to be of wood pulp origin.

Osaka, Japan

6/28/82

KONISHI PAINT

Met with - Mr. S. Nakano - Chief Engineer
Mr. K. Kawanido - Senior Engineer
Mr. T. Nishibe - Chief Engineer
Mr. M. Shigemoto - Research Section

Use small amounts (1.5 tons/month) of RG-144 (Adhesive - Shell Epon 828) and RG-244 (Sealant - Polysulfide, Butyl Rubber). Applications are industrial only, no automotive, and are produced for both domestic and export markets. Large amounts of Aer-O-Sil are used (quantity unknown) as the cost of Aer-O-Sil is lower than RG-244.

They are concerned about dust problems associated with using asbestos and asked for a sample of CALLASBESTOS, 5 gal. DIDP/RG-244. We will have sample sent to King City and loaded in one of Tomoe's containers suitably marked for this customer.

Osaka, Japan

6/28/82

ASAHI PEN

This location is the parent company of ASAHI PEN, Seattle, Washington, a former user of SG-210 used in textured paints. Because of tight regulations and dust control problems, the textured paint had been made in Seattle and shipped to Japan for distribution in that market. Now, the SG-210 has been replaced with Mini-Fibers, and neither Japan nor the Seattle location use asbestos. However, they have asked for literature comparing RG-244 and Aer-O-Sil and we will send to Tomoe for distribution to ASAHI PEN.

Osaka, Japan

6-29-82

SHINWA TRADING CO., LTD

Met with - A. Hyodo, Manager

One of our options in sales coverage of Southeast Asia, in addition to U.C.C. Hong Kong, is Tomoe Engineering. Shinwa Trading is a contact of theirs and is reported to have very good coverage in Thailand. This meeting was to explore his interest and to acquaint him with our objectives.

Mr. Hyodo, is a Japanese national who spends six months a year in Thailand. Fifty percent of their trading company volume originates there, and they represent some 150 companies of various size trading with that nation.

The Thailand market consumes some 330 tons of Aer-O-Sil per year, being used in such markets as polyesters and sealants. Three polyester producers using Aer-O-Sil are:

1. Siam Chemical Industrial Co., Ltd. - This is either a Reichhold Licensee or a Joint Venture.
2. Thai Eternal Ind. Co., Ltd.
3. Ethanol Resin Ind. Co., Ltd.

Other polyester producers in Southeast Asia are located in:

1. Taiwan
Aromatic Chemical Industrial Co., Ltd.
En Chuan Chemical Industries Co., Ltd.
Eternal Chemical Co., Ltd.
Kuo Tai Resin Industrial Co., Ltd.
Yong Shun Chemical Co., Ltd.
2. Singapore
Singapore High Polymer Co., Ltd.

There are also some paper companies as well as one small floor tile company. In residential and commercial construction, wood and marble are used for floors because of its availability.

We have been cautioned that to develop the Thailand market will require much patience. Years of habit will be slow to change and the prospects will require much handholding and encouragement.

We are to provide Mr. Hyodo with a list of product applications and recommended "Calidria" grades so that he may conduct additional evaluations of our market potentials.

We were impressed with his summary of Thailand potentials and feel that his association with Tomoe Engineering will be successful if we make the decision to not go with direct U.C.C. coverage of Southeast Asia.

Tokyo, Japan

6/23/82

TELNITE CO., LTD.

Met with - M. Suzuki - Manager, Business Department
Z. Yoshida - Deputy Manager., Business Operations
S. Hinoki - Manager, Procurement Section

Approval was reached on their new bag and a 10,000 bag order was telexed to King City. They understand that future orders will be no less than 20,000 bags. They wish to be advised on when these bags will be available. If we notify Tomoe of the arrival date, they can relay to Telnite.

They commented that Canadian asbestos prices were either firm or lower because of soft business and high inventories. Since they and their customers operate on one year contracts, any price increase after the contract has been signed is not passed on to the customer and consequently means that they absorb the increase until the next contract is signed.

One of their customers is drilling in the China Sea and they expect that in the future if oil is located their business will increase proportionally. They are optimistic in this regard.

They had the usual dust problem questions which were answered in the appropriate manner.

They also asked that we look into other products that U.C.C. supplies to the Oil Drilling Industries and we promised to do so.

Kyoto, Japan

6/29/82

CHUGOKU MARINE PAINT, LTD.

Met with - Mr. Koshiro Kikuchi - Manager

This is a small RG-144 - RG-244 customer using RG-244 in an alkyd resin paint undercoating. They experience minor dispersion problems but this in no way is as serious as the slowdown of construction which effects all paint manufacturers. Their plant in Hiroshima produces marine paints and is a prospect for RG-244. Aer-O-Sil is not used in the alkyd resin application because of its high price. They also report the use of RG-244 should show a steady increase.

Yokkaichi, Japan

6/30/82

MATSUSHITA DENKO CO.

Met with - Mr. A. Shinagawa - General Affairs Dept.
Mr. Kawasaki - Manager General Affairs Dept.

HPP is used at a rate of 80 tons/month in a ceiling tile application. This is a growing business with 30% of the finished product for the export market. This figure is expected to increase to 40%. Problems exist in the following areas:

1. Bag Weights - Normal batch charge is 500 lbs., 11 bags @ 50 lbs./each. According to customer, the lowest weight has been 43.5 lbs. The weight variance has caused considerable problems and we have agreed to issue a credit for \$2,196.48. This charge represents weighting and repalletizing 13,728 bags. King City inventory of HPP bags indicates weights of 47-56 lbs. Tomoe desires we supply bags over 51 lbs. Letters from Tomoe Engineering are attached.

Possible solutions to this problem are:

- A. Both Tomoe and Customer are exploring possible use of a flexible container holding no more than 550 lbs. Tomoe is to check domestic container manufacturers and customer is to submit design samples of their choice to King City for filling and handling evaluations.
- B. We are to estimate the cost of supplying HPP in 70 lb. bags. Keeping in mind the 550 lb. charge/batch, this would require 8 bags @ 70# each rather than 11 bags @ 50 # each and an expected small decrease in cost.

2. Price:

- A. They have asked for a 10% price reduction on HPP at least until the yen becomes stronger versus the dollar. (Currently at 256 yen/dollar - they would prefer 220-230 yen/dollar). They also request no price increase in 1983.
- B. We will sample them with SG-100 for evaluation and based on their results of the evaluation will supply us with specifications for a new grade to be produced in King City specifically for them.

They have also evaluated HPP in wall board, this would be similar in content to the ceiling tile, and would replace dry wall and wood panelling. The finished product would be sold in decorative designs. Once the building industry rebounds, and customer acceptance proves positive, our sales to this company could double or triple. (Currently at 80 tons/month.)

Our asbestos pricing in Japan is becoming critical. Because of the slowdown in construction, asbestos inventories have reached an unprecedented high and overall imports of asbestos into Japan have decreased some 22% (1981 238,000 tons, 1980 305,000 tons). Both Carey and J.M. are making price concessions, and neither have raised prices since 1981. A "Calidria" price freeze for 1983 has been requested by almost all customers visited. We should give serious consideration to this request.

Kyoto, Japan

6/30/82

SUSUKA PAINT

This company is using 2 tons of HPO/month in a textured coating and 5 tons of RG-244/ month in an acrylic emulsion undercoat. The RG-244 formulation meets J.I.S.A. #6910, E Type specification. Their sales personnel will undergo a special training class next month on the merits of this formulation, and accordingly sales are expected to show an increase.

Short weight bags of HPO are also a problem here, some off as much as 38%. Consequently, Tomoe has had to weight 765 bags at a charge of \$122.40. We have agreed to this charge and will notify International Distribution to write the credit. Request for credit attached.

Hamamatsu, Japan

7/1/82

YAMAHA
NIPPON GAKKI CO., LTD.

Met with - Mr. M. Imanishi - Manager Chemical Section

This location produces pianos and is evaluating RG-244 in their polyester finishes. They showed us test panels with RG-244 as the Thixotropic additive which indicated the presence of small fibers. These fibers are said to be RG-244.

In our discussion, REB advised that the 1.5% addition of RG-244 may be high and they should cut back to 1% and add 0.02% Diethylene Glycol. They also may want to evaluate equal parts Aer-O-Sil and RG-244.

They also claim that the product dispersed at 3,000 RPM with a single pass through a sonic mixer developed foam which was also difficult to control. Suggested courses of action were to add a silicone defoamer and that RG-244 may not need that extensive mixing.

Aer-O-Sil is used at a rate of 6 tons/year.

Fuju, Japan

7/1/82

POLY PLASTIC

Met with - Mr. K. Takahashi - Manager Research Dept.
Mr. T. Kasuga - Research Director
Mr. Y. Ikenaga - Assistant Manager

This company is a Licensee of Celanese Company, using 4 tons/month of RG-144 in a PBT resin. PBT is a Thermoplastic Polyester, and the RG-144 is used as a non-dripping agent. Other PBT producers in Japan using RG-144 are Toray, Mishubishi Chemical and EPL. The RG-144 is used at a rate of 2-3% by weight.

Sales of this product are strong. They expect to expand their production within two years. We were asked to provide production of U.S. PBT producers and what type non-dripping agent they currently use.

Toyko, Japan

7/2/82

CEMEDINE

This customer is using RG-144 - RG-244 in adhesive and sealant applications. Shipments are made to their plants in Nagoya and Sowa. Automotive sealants containing RG-244 are used by Toyoda and others. The asphalt undercoating market is decreasing as they are more susceptible to corrosion. They are being replaced by PVC formulations which although more expensive, are said to provide more reliable protection.

Sales of products containing RG-244 are expected to increase. Joint ventures with companies in Taiwan and Thailand are either customers or prospects and this aspect will be investigated. Unknown amounts of 7R and 7M are used in construction applications.

Moka City, Japan

7/2/82

EPL

Met with - Mr. H. Koike - Manager Product Development
Mr. T. Kitamura - Product Development

This is a Thermoplastic Polyester (PBT) producer operating under a General Electric Licensee. They are aware of the General Electric ban on the use of asbestos in all of their products, and therefore do not use RG-244 as their non-dripping agent. However, they are testing the RG-244 in some of their own products where there would not be a conflict with General Electric. If Tomoe were to locate a custom compounder who would mix the RG-244 into a resin or solvent then their evaluation could proceed more rapidly.

Total potential is 3-4 tons/month of RG-244.

Ishioka, Japan

7/5/82

SHOWA DENKO

Met with - Mr. K. Fujiyashi
Mr. Y. Unieda

This is an SG-100 - SG-130 asbestos cement extrusion molded producer, who at the present time is running evaluations attempting to replace a Canadian Grade 7M. So far, he has not experienced the success his competition Nozawa Co. has had in using SG-100. However, Nozawa Co. is blending Russian Asbestos Grade 5 and SG-100, and Showa Denko is attempting to blend Canadian Grade 6 and SG-100. It is possible the quality of the Russian and Canadian is quite different but it is a fact that Nozawa Co. switched to a Russian supplier to avoid the supply problems the Canadians have had in the past several years.

At present their plant is not equipped to open the SG-100 pellets nor to blend the Canadian Grade 6 and 7. This work is performed by a custom blender, Sando Shoko, located in Toyko. Shipments come into the Tokyo port and are blended, bagged and reshipped to the customer. To overcome these problems a new plant is being considered that would provide the necessary equipment for fiberizing and blending.

SG-130 is also under evaluation. However, this new application is not an extrusion molded product. Both evaluations of SG-100 and SG-130 are estimated to conclude in one year.

Tokyo, Japan

7/5/82

TOYODA TSUSHO KAISHA, LTD.

Met with - Mr. M. Hattori - Technical Adviser
Mr. T. Higuchi - Chemicals
Mr. N. Nagao - Manager, Chemicals

I had been in contact with their Elk Grove Village, Illinois, branch with the thoughts of direct sales of RG-144 - RG-244 for their automotive sealants. Samples had been sent to Japan but product testing was never begun. Since a trip to Japan was scheduled, their Elk Grove Village office arranged some contacts and Tomoe Engineering set up the appointment.

Toyoda does not produce sealants themselves but purchases them from independent automotive suppliers. For example, Cemedine, one of the customer seen on this trip, is a supplier of sealants to Toyoda. We were referred to their Construction Division in Nogoya, as that plant had purchased small amounts of asbestos from China. However, there were customer complaints, product returns and credits to be issued. So China is no longer a supplier. Tomoe will follow up on this lead.

Although it took some two years to determine that Toyoda would not be a direct "Calidria" customer. Our indirect future potential as it relates to UCC may still bear fruit. The Morgan Guarantee Bank, handling the desposition of the Blue Creek Mine, is in harmonious business negotiations on a Joint Venture between Toyota American, Inc., and a large independent U.S. coal producer. Toyota is optimistic on this matter.

END OF REPORTS OF CALLS

J.P. Norris

T. P. NORRIS

TPN:sm

TOMOE ENGINEERING COMPANY, LTD.

(ANNEX OFFICE)
SHIN SHIN KAIKAN BUILDING
14-1, NIHONBASHI 3-CHOME, CHUO-KU
TOKYO, JAPAN

MAIN OFFICE:
DAIMI MARUZEN BUILDING
9-2, NIHONBASHI 3-CHOME, CHUO-KU
TOKYO, JAPAN

CABLE ADDRESS: "EOMOT"
TELEX: 02233506 EOMOT J
TELEPHONE: TOKYO 274-0411

July 8, 1982

Mr. T. P. Norris
Manager, Market Development
Union Carbide Corporation
Metals Division
100 Oceangate, 10th Flr.
Long Beach, Ca. 90802

Subject: Monetary Compensation

Dear Mr. Norris:

In accordance with our agreement at the final meeting on last July 6th, in regard to the monetary compensation to cover the cases of off-weight bags and specs for Nittobo, Matsushita and Suzuka, may we request of your payment of the sum stated in the attachment hereto at your earliest convenience.

The total amount of \$3,015.⁶⁸ stated therein was calculated at exchange rate of ¥250/\$, but while the dollar is getting stronger nowadays, you may apply the rate on the date of your remittance.

Thanking for your cooperation in this matter, we remain

Very truly yours,

TOMOE ENGINEERING CO., LTD.



H. Fukuma
Inorganic Chemicals Section

HF/yk

Encl.

cc: Mr. R. E. Byrne, Jr.
Mr. N. Enomoto
Mr. M. Kanno

Received 7/14/82 - Sent to ELBA.

Calculations for Monetary Compensation

June 17, 1982

1. Nittobo

Transportation charge	¥136,000
In-Out Turn charge	38,200
Total	¥174,200
	(\$696.80)

Exchange rate: ¥250/dollar

2. Matsushita

Weighing and repalletizing charge

13,728 bags x ¥40/bag = ¥549,120
(\$2,196.48)

Exchange rate: ¥250/dollar

Normally weighing and palletizing charges are ¥80 per bag, but after negotiation we settled upon ¥40 per bag.

The abovementioned 13,728 bags include the import up to 4,500 bags of order B-13408 delivered in June. For bags of July and onward deliveries further negotiations should be made.

3. Suzuka Paint

HPO's net content is also a problem at Suzuka Paint, and up to the present we have had 765 bags weighed, its charge being:

765 bags x ¥40/bag = ¥30,600
(\$122.40)

Exchange rate: ¥250/dollar

Nitto Boseki Co.

Date: June 24, 1982

Subject: SG-100 for Vinyl Asbestos Tile

Attendants:

Nittobo: Mr. Tsuda, Manager, Materials Section
Mr. Oribe, Tile Production Techniques
UCC: Messrs. Byrne and Norris
Tomoe: Fukuma, Endo, Uchiyama

Background

This company is producing vinyl asbestos tile with 50 - 70 tons a month of SG-100. The construction materials industry is in heavy recession and their output has decreased phenomenally. They had been using HPP for ceiling tile, but due to the toxicity problem discontinued it in November 1981.

Discussions

UCC and Tomoe personnel expressed appreciation of their constant use of SG-100. For floor tile, however, the boss of Mr. Oribe is pressing him to develop asbestos-free tile. Regarding his inquiry on possible substitutes, Mr. Byrne replied that they were being searched but currently available ones are either economically or technically infeasible. For the problem of specks appearing on their product, Mr. Byrne explained its probable cause being that one of two material tanks at the plant had busted and the remaining one was overloaded and turned out overly thick material. Corrective measures were taken, however, to preclude chances for recurrence. This matter being settled, they would continue to use SG-100 for the time being.

For the ceiling tile, Mr. Norris inquired if there were chances for their resuming use of HPP asking if UCC could help them in doing so. The answer was negative, however, and they would never use it even for half the price.

END

Nozawa Co., Ltd. (Tokyo Plant)

Date: June 25, 1982

Subject: SG-100 for Building Blocks

Attendants:

Nozawa: Mr. Okuma, Manager, Production Section

UCC: Messrs. Byrne and Norris

Tomoe: Fukuma, Endo, Uchiyama

Purpose of the Visit: Courtesy call

Background: Same as Tokyo Office

Discussions:

Mr. Okuma is the key man in the technical department of Nozawa. According to him, SG-100 presents no technical problems whatsoever in the current application, which calls for SG-100's rendering surface smoothness and dimensional accuracy to the product. Also for smooth molding short fiber materials like SG-100 is required. Materials falling under this category are SG-100 and Carey 7MS, but other counterparts are not tested yet and their serviceability is unknown. Amicable atmosphere prevailed during the meeting, Mr. Okuma showing and explaining on samples of their "Aslock."

At present the maximum size of their product is 4 m(L) x 600 mm (W), and to meet the market demand larger size ones (6 m(L) x 1,200 mm(W)) are being planned for production. In the interim 5 m-long ones are under trial production. Due to lack of the milling equipment SG-130 is being used in lieu of SG-100 but they do not count on its mechanical strength either.

He asked for supply of lower cost material as they anticipate their production to increase fivefold in five years. In response Mr. Byrne stated both UCC and Tomoe were doing maximum efforts for pricedown and he would like to offer whatever cooperation possible to keep this business going.

END

Dainippon Toryo

Date: June 28, 1982

Subject: HPO for Emulsion-type Paint

Attendants:

Dainippon Toryo: Messrs. Tahara (Manager), Kusumoto, Takada

UCC: Messrs. Byrne and Norris

Tomoe: Fukuma, Ishida, Uchiyama

Currently a small amount of RG-244 is being used at this company, but its application is unknown.

Based on the information that they are recently putting efforts in emulsion-type paints, HPO had been sampled through procurement personnel of the company for test and evaluation as a thixotropic agent for such paints, and we expected to hear the results of it on this visit. Unfortunately, however, the test was not yet initiated.

For texture paints they are using 7 class asbestos, pulp fibers and polyethylene fibers. (CELLULOSE)

Therefore, we briefed them on the characteristics of Calidria asbestos again and asked for its evaluation. Another sample of HPO will be delivered shortly for testing.

END

Kishu Paper Co. (Osaka Plant)

Date: June 28, 1982

Subject: T-135P for Decorative Paper

Attendants:

Kishu: Mr. Yamauchi, Engineer, Production Dept.
UCC: Messrs. Byrne and Norris
Tomoe: Fukuma, Ishida, Uchiyama

This plant is making decorative paper for table tops etc. using a large amount (about 100 tons/month) of rutile type titanium oxide. Table tests of our T-135P have been going on for the purposes listed below, but at the time of our visit no test results were yet available.

1. Reduce addition of TiO_2
2. Improve opacity of paper
3. Improve one-pass retention

As they have only one hydropulper at this plant, when T-135P is added to it the material tends to go into other parts of the system where it is not required. So our discussion centered on where is best to add T-135. The hydropulper is still best place ideally, but while it is impracticable with the present setup, it was recommended to disperse the material in the tank in advance and add the mix to the stock chest or the mixing chest.

END

Date: June 29, 1982 (at Tomoe's Osaka Office)

Subject: Market Development in S.E. Asia

Attendants:

Shinwa: Mr. Hyodo, Manager

UCC: Messrs. Byrne and Norris

Tomoe: Fukuma, Homma, Ishida, Uchiyama

Shinwa Trading is specialized in the export of various commodities to Southeast Asian markets, and 60% of its turnover is from sales to Thailand.

Mr. Hyodo is very familiar with Thailand's chemical industry and spends half of a year in that country.

The primary objective of this meeting was to discuss and determine feasibility of exporting Calidria asbestos to Thailand.

Incidentally, Tomoe personnel had contacted several major trading firms in Japan for their possible participation, but they showed interest only in bulky commodities and not in Calidria. According to Mr. Hyodo, Thailand is currently importing about 300 tons Cab-O-sil 200. As this figure was greater than we had initially anticipated, we asked Mr. Hyodo for its breakdown and he promised it.

Regarding the situation in Thailand, Mr. Hyodo commented as follows.

Unlike Japanese, the people of Thailand are very slow in action; even when we ask for test and evaluation of a certain product, sometimes it takes them well half a year to get it started. To do business with them their such characteristics and peculiarities should be kept in mind. In near future he will go to Thailand again and check into the situations of polyester, paint, tile, paper and other makers there and report his findings to us. If Thailand has been found a promising market for our products as a result of such a survey, he would like UCC and Tomoe personnel to visit there with him for market development.

END

Matsushita Electric Works Ltd. (Yokkaichi Plant)

Date: June 30, 1982

Subject: HPP for Ceiling Tile

Attendants:

Matsushita (1st Bldg. Materials Division):	Mr. Kai, Manager, Administration Dept. Mr. Kawasaki, Manager, Materials Section Mr. Shinagawa, Materials Section
UCC:	Messrs. Byrne, Norris
Tomoe:	Fukuma, Shiraishi, Uchiyama

Background:

About 80 tons a month of HPP are being consumed at this plant for addition to rockwool ceiling tiles and wall materials. HPP helps uniform dispersion of tapioca and rockwool and functions as a viscosifier. The matters of Matsushita's primary concern are now pricedown and toxicity of the material.

Discussions:

1. Flexible containerization. To help implement this idea, Tomoe will lay its groundwork by checking domestic makers of such containers, working out specs and figuring out its costs. Tomoe will also study feasibility of flex-containerizing the material after arrival in Japan.

2. Price problem. Matsushita asked for 10% reduction of HPP's FOB price on the grounds of drastically low price of 7 class asbestos (down 20% from mine list price) and the prevailing low-Yen situation. UCC contended such reasonings do not justify pricedown since Canadian 7 class was a sort of by-product and not competitive, and for the effect of the currency value, there are ups and downs in cycle and the value would average in a long-run. Matsushita further asked for pricedown of HPP for their export products. UCC again refused stating it was Matsushita's problem and to be solved on its own.

Polyplastics Co., Ltd. (Fuji Plant)

Date: July 1, 1982

Subject: RG-144 for PBT

Attendants:

Polyplastics:	Mr. Kasuga, Director-Manager, R & D Messrs. Ikenaga and Takahashi, R & D
UCC:	Messrs. Byrne and Norris
Tomoe:	Fukuma, Mito, Uchiyama

Background:

A licensee of Celanese Co., Polyplastics is using 4 tons a month of RG-144 as non-dripping agent for PBT. This company is the largest of PBT resin makers in terms of output, and also a producer of polyacetal resin. PBT resin is usually reinforced with glass fibers and molded into various parts for uses in the electric/communication, automobile and machinery industries.

Dust Control in America:

There has been no particular change in the asbestos dust control regulations, stated Messrs. Byrne and Norris. People are becoming cool and less critical of asbestos. This comment confirmed the information in this regard they had from Celanese.

Other Discussions:

The Polyplastics, Celanese and Hoechst (W. Germany) in technical tieup are taking turns in holding technical and production meetings once a year to exchange information.

According to Mr. Kasuga, the company is planning to expand PBT production facilities within two years to meet the increasing demand for this resin. In line with it, their usage of our RG-144 would naturally increase. The total demand in Japan for PBT resin in 1981 was estimated at 15,000 - 16,000 tons and it is anticipated to exceed 20,000 tons level in one or two years. About 70% of all PBT resin is reinforced with glass fibers and about 35% is said to contain non-dripping agent of one type or the other.

Nippon Gakki Seizo Co. (Hamamatsu)

Date: July 1, 1982

Subject: RG-244 for Polyester Resin Paint

Attendants:

Nippon Gakki: Messrs. Imanishi (Chief) and Kawamukai, Wood
Materials Technical Group

UCC: Messrs. Byrne and Norris

Tomoe: Fukuma, Shiraishi Uchiyama

At this company RG-244 is being tested for thixotropic control of polyester resin coating material for piano. At present they are using 2 tons a month of polyester resin formulated with aerosil #200. They appreciate RG-244's retention of transparency of the paint better than aerosil #200. However RG-244-formulated paint leaves thin white lines on the coated surface upon sanding in the finishing process.

On the thought that improved dispersion of RG-244 might solve the problem they tried ultrasonic "Sonorater" mixer replacing the impeller type one to improve the dispersion, however not only did it fail to solve the problem but caused another trouble of foam entrapment.

Upon discussion of these problems, Mr. Byrne suggested a reduction of RG-244's rate of addition from current 1.5% to 1.0% level, mixed addition of RG-244 and aerosil #200 by 0.5% each and to add silicon type defoaming agent to remove foams.

They will continue tests in accordance with these suggestions.

Further, as they are concerned about possible toxicity of asbestos, we will explain the situation with dust measurement data on later date to dispel their misgivings.

They also brought up another problem that RG-244-type paint had clogged 50 micron mesh filter. (But the paint that passed this filter provided satisfactory coating surface.) Then they asked if UCC could manufacture RG-244 of fiber length less than 5 micron. Mr. Byrne replied it would be technically possible but economically infeasible.

END

5. Regarding the weight and printing irregularities of RG-144 bags, Mr. Byrne explained action was being taken to preclude future recurrences and Cemedine was satisfied.
6. Mr. Norris explained about the project underway at UCC to blend Canadian and Calidria asbestos. Also the catalogue of Callasbestos was offered.

END

Toyoda Tsusho Kaisha Ltd.

Date: July 5, 1982

Subject: Calidria Asbestos

Attendants:

Toyoda: Mr. Nagao (Manager) and two others
UCC: Messrs. Byrne and Norris
Tomoe: Fukuma, Endo, Uchiyama

Toyoda America's Chicago office had contacted UCC on Calidria asbestos.

Messrs. Byrne and Norris indicated their desire to meet with Toyoda Tsusho during their Japan trip and so this visit was arranged.

We met Mr. Nagao, Section Manager (and 2 others), as recommended by their Chicago office. However they did not have any knowledge on asbestos. They called their head office in Nagoya but as Mr. Takeda was out of office no further information was available.

Mr. Nagao's section handles plastic and as they did not know anything about aerosil or Cab-O-sil we briefed them on those products.

Reference: Last year when I visited UCC Messrs. Myers and Byrne told me about Toyoda America and therefore I did contact Mr. Takeda upon my return. The result of the contact was reported in our letter of June 3, 1981.

END

3. Performance comparisons. They noted no particular superiority of SG-100 over Canadian 7 class in respect to the surface condition and moldability of the product, which would presumably be because of its mix with Canadian 6 class. We then inquired about if they could accept a mix of SG-100 and Russian 5 or 6 class should we supply it. In reply they stated they would most possibly buy it though depending upon price. (The Russian asbestos alone provides poor surfacing of the product, but SG-100 would improve it. Hence our idea of such a mixed material.)

END

4) Tokai: The company installed the equipment to manufacture boards in the end of June. Potential 50 - 60 tons/month. For its performance of SG-100 proven at Nozawa they are interested in SG-100. Will contact them and report outcomes.

5) Nippon Concrete Kogyo Co. Test machine is in operation. Offered sample of SG-100 for testing. Potential is unknown. Will contact and report results.

END