

SHELL OIL COMPANY

1310 OSP

RECEIVED

05-EQP-RFT

DATE NOVEMBER 14, 1972

TO SHELL ENGINEERING COUNCIL - CHAIRMAN
NOV 17 1972

FROM ENGINEERED EQUIPMENT AND
SERVICES - PURCHASING -
HEAD OFFICE

BWD
K
OPA JFB WAR HHZ FILE

SUBJECT SUPPLY PICTURE
ASBESTOS-FREE INSULATION

Your October 26 note asked for an update of the supply picture for asbestos-free thermal insulation. To this end we have talked recently with several people who have a good view of the industry, and from these discussions inferred the following.

After about late Third Quarter 1973, there should be no significant quantity of asbestos-containing material remaining in the market and, if present schedules hold, none at all from the major manufacturers. At this time, all of the majors either have converted all or part of their production or are committed to a scheduled conversion program. As you know, Fibreboard has been offering only an asbestos-free material for some time now, while both Johns Manville and Owens Corning are converting. We hear that Keene Corporation is actively negotiating for a licensing arrangement.

Between now and late Third Quarter 1973, both asbestos-containing and asbestos-free materials will be available in the market with the asbestos-free becoming increasingly available while the asbestos material vanishes. During this time, there will probably be some intermixing of these materials without so notifying the buyers or marking cartons as the manufacturers convert plants in stepwise fashion and as the inventories of asbestos-containing materials are worked off.

Also during this period, and probably well into 1974, we expect to see several changes of composition of the materials being marketed as each manufacturer strives to hold or improve his market position by improving quality to gain buyer preference. This seems certain since these will be all new materials, developed in haste and subjected to only cursory field trials, and buyers will not have had opportunity to evaluate or compare one product to another. The buyers will compare products, which will indeed tend to shape the market split between manufacturers and, if the split is not to the manufacturers' wishes, will cause them to revise their products. As we have seen, which probably portends the future with all manufacturers, in an attempt to gain customer acceptance Fibreboard has made numerous changes in their product in the thirteen months since introduction.

As to pricing, the asbestos-free materials will cost more and, further, we will see less, if any, of the price cutting that has been characteristic of this industry in the past. We are told that the asbestos-free material costs more to produce: fibers are more expensive; the process takes more of a more expensive fuel; and costs of R&D and capital for conversion must be amortized. The cost cutting that we have grown used to seems to be out for the future because (a) supply capacity has decreased some 15% since

PLAINTIFF'S EXHIBIT

SH-1848

LAM 025837

Pittsburgh Corning (Unibestos) and GAS (Calsilite) withdrew from the market, (b) demand is increasing with acceleration of utility construction programs and with tendency of all to apply more insulation due to increasing fuel costs and (c) the manufacturers seem to recognize this change in supply/demand picture and those that we talked to seem determined to avoid such cost cutting in the future. We don't yet know what the asbestos-free material will cost and probably will not know until all of the old material vanishes from the marketplace.

The trend toward producing and marketing only asbestos-free materials appears irreversible. We understand both Johns Manville and Owens Corning decided this firmly at corporate level some time ago before allocating funds for R&D and for the new facilities.

At present, the market split among the major manufacturers appears to be about as follows:

Johns Manville (Thermobestos) - \$15-\$20MM
 Owens Corning (Kaylo) - \$10-\$12MM
 Fibreboard Corporation (Pabco) - \$5-\$6MM
 Keene Corporation (Thermasil) - \$3-\$4MM
 Jim Walters Corporation (Careytemp) - \$3-\$4MM

Incidentally, we understand that Pittsburgh Corning (Unibestos) and GAS (Calsilite), before quitting the business within the last year, enjoyed sales totalling some \$9MM per year, or about 15%-20% of the market.

The supply picture by major manufacturer appears to be shaping up as follows:

Johns Manville will be converted totally to asbestos-free material by end of June, 1973. The Manville, New Jersey, plant (\$12-\$15MM/year) is being converted stepwise with one-sixth of production now asbestos-free and another sixth scheduled for conversion this month. This stepwise conversion will be completed next June. The Long Beach, California, plant (\$3-\$5MM/year) will be shut down for conversion after the first of the year and started back up in May, 1973. We understand that they will install some \$2MM of new asbestos-free calcium silicate capacity at an existing plant in Waukegon, Illinois. Most of the present asbestos-free production is being sold in the Northeast. They predict that asbestos-free material will be introduced in the Gulf Coast in Second Quarter 1973.

Owens Corning claim that their plant in Berlin, New Jersey (\$10-\$12MM), will be converted to asbestos-free in mid-November, 1972, and that they should be producing and selling only asbestos-free material by end of First Quarter 1973. Some asbestos-free material is being mixed in with the old material now.

Fibreboard's plant (\$5-\$6MM) in Emeryville, California, has been producing only asbestos-free material since September, 1971. We hear that they made another change in the material about two weeks ago in an attempt to improve its physical properties. They are constructing a new plant of some \$5-\$6MM capacity near Ruston, Louisiana, which they feel will be in production about mid-summer, 1973.

ABS-016976

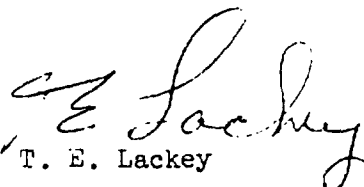
LAM 025838

Keene Corporation operates the old Baldwin-Ehert-Hill plant near Valley Forge, Pennsylvania, producing some \$3-\$4M of calcium silicate going primarily into the Eastern market. We hear that they are negotiating with Owens Corning for a license to manufacture the asbestos-free material.

Jim Walters Corporation last summer bought the old Philip Carey building materials business from Panacron, including the Careytemp insulation plant near Cincinnati, Ohio, which has produced an asbestos-free perlite material for some years at about a \$3-\$4MM per year rate. It appears that Jim Walters intends to continue operation of this facility at least for the time being.

Please call if you wish to discuss.

TEL:BSM


T. E. Lackey

cc - Shell Engineering Council Members

E&P

Production - Gas Engineering - Mr. J. E. Ryburn
Southern Region - Public Affairs - Mr. G. Derickson
Manufacturing - Engineering - Mr. W. C. Bluhm/Mr. C. L. Richards
Shell Chemical Company - Environmental Engineering - Mr. R. B. Howard

LAM 025839

ABS-016977