

INTEROFFICE CORRESPONDENCE
Gulf CorporationPLAINTIFF'S
EXHIBIT
GF-899

DATE July 29, 1968

TO Mr. R. P. Fraser ✓
LOCATION N.Y.

CC

FROM Mr. W. Darrell
LOCATION N.Y.SUBJECT THREE YEAR MANUFACTURING PLAN

Attached are copies of the plans prepared by Mr. Gedettis and Mr. Armstrong for their respective sections, as well as information prepared by me for calsilite, automotive, pipe wrap and flooring felts at Gloucester.

This cover letter also contains some of the points which I feel should be emphasized.

In no way do I feel we are submitting a complete plan - we are only covering the subject of manufacturing capacity in relation to projected sales demands. It is my intention that by early winter I will have become familiar enough with our problems and opportunities so that a complete plan of facilities, personnel, materials and objectives can be developed.

GRANULES:

The sales projections indicate that major growth will occur in the shipping area of the Annapolis plant, requiring major expansion of that plant in early 1970. Other plants can meet their goals by incremental improvements at low capital cost.

I would like to stress that we have a major dust problem at Delta and will propose a program to update that plant's collection system so that health hazards will be removed.

ASBESTOS FIBER:

We have now established that economic ore reserves are about 12 years at our milling capacity of 40,000 tons. With this short life of mine, we should not plan any capacity increase at Vermont.

We do have a block of ore which would have to be mined underground. At 40,000 tons per year fiber sales, this would give us an additional 5 years of life. However, profits would be marginal.

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CALSILITE:

With completion of the current I.A. for expansion at Gloucester, we have sufficient capacity. In early 1969, we will restudy projected demands and investments to determine what additional capacity could be obtained.

AUTOMOTIVE:

We have sufficient capacity to meet projected demands on current type of products. There is some thought that products of the near future would be molded and/or faced with foam rather than amberlite. The implications of this will have to be studied.

FLOORING FELTS - Gloucester:

Recent projections by C.D.D. indicate that demand at Gloucester will, in about 1969/1970, be beyond its total capacity. C.D.D. is making studies to determine the best solution. Among the considerations is a new machine for the production of both organic and asbestos flooring felts.

SATURATED PIPE WRAP:

Present equipment, while inefficient, has the capacity to meet the demand. We will study whether or not modernization of the equipment will be justified.

FELT PRODUCTS:

The major considerations for this group are:

1. The best method for expanding Feutron production.
2. The installation of additional capacity for Ford Filters and comparable products.
3. Warehouse capacity.
4. Future of Drycor felts.
5. Relocation of Detroit Fabricating Shop.

GENERAL:

My newness with most of the operations in the Division limits my ability to judge our strengths and weaknesses. At this point, however, it appears we have several needs:

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1. Improving on our cost performance statements and analysis work.
2. Upgrading, at plant level, our engineering capability.
3. Placing several college graduates, with technical education, into our supervisory organization.
4. Means for constantly appraising our hourly manpower needs, with emphasis on reduction of numbers.

W. Darrell

WD:MM

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INDUSTRIAL PRODUCTS DIVISION

Projections for 1969, 1970 & 1971 for manufacturing and fabricating wool and Feutron Felts and manufacturing of papermakers felts and Erie 16th St. asbestos sheathing and mill board.

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A. ANALYSIS OF PRESENT POSITION

1. Plants and Capacities

Table I indicates maximum productive capacity for each of the five mills and two fabricating plants based on two eight-hour shifts per day, five days per week plus Erie 16th Street based on three shifts, seven days per week. Major product classes for each location are also shown.

2. Capacity Needed to Meet Sales Objectives

Each of the felt categories as presented in the marketing projection is discussed with regard to adequacy of present capacity and additional capacity needed for growth.

Table II is a recap of capital expenditures by year 1969 through 1971 for projected growth.

B. PRODUCT LINE

1. Pressed Wool Felt

Hair Felts

The decrease in volume will make floor space and equipment with minimum modifications available for increased sheet felt capacity.

Piano Felts

Capacity is adequate for volume as projected through 1971.

Wool Roll, Sheet & Filter Felts

To increase capacity, one additional three card set is recommended for Newburgh. This card can be transferred from Westerly Mill and replaced at Westerly with a double compact. (Compact cards can card Feutron felts but not wool felts and are about one-third the cost.) In addition #5 card at Franklin should be increased from a two card set to a three card set at an estimated cost of \$92,000. These

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additions to carding capacity will provide approximately two-thirds of the added capacity needed. More new equipment would require a major expenditure including a building and, as indicated in the Sales Forecast, selection of wool felt business by profitability may be preferable.

2. Feutron Felts

Combining direct mill sales and inter-company sales expansion of Westerly Feutron needle loom capacity by approximately 55% is needed by 1971. The problem is complicated because the three needle loom units, Westerly, Drycor and Newburgh Feutron, are at capacity and have no floor space available for added equipment. Two approaches are recommended for immediate study:

- a. Westerly Mill purchase land adjacent to the mill that is available, zoned for industry and large enough for plant expansion. A building addition of 10,000 square feet plus installation of two Bywater double board over and under needle looms will provide the added capacity. Estimated capital costs 1969-1971 are:

Purchase of land	\$20,000
10,000 sq. ft. bldg. addition	200,000
2 - 75" compact cards	140,000
2 - 120" Bywater over and under looms	90,000
Miscellaneous equipment	50,000
	<u>\$500,000</u>

- b. Consolidation of Westerly Mill, Drycor and Newburgh Feutron into one plant - a new building of 150,000 sq. ft. would be needed. Estimated cost including added equipment but excluding land, is \$3,500,000. The expense seems disproportionate and there are disadvantages to combining the three operations, all of which are non-union and are not now located in the same area.

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3. Windsor & Bonded Fabrics

Present capacity is adequate through 1971.

4. Fabricated Components

Present capacity is adequate through 1971.

5. Filter Products

Cartridges - Capacity is adequate through 1971.

Calibrated Bags - Equipment will be added for a 65% increase in capacity in 1969 at a cost of \$10,000.

Molded Products - Capacity is adequate through 1981.

Fabricated Products - Ford Motor Co. filter adaptor requirements plus projected sales to other customers will require a second line and a building in 1969 at a cost of \$500,000.

6. Drycor

Projected growth at Drycor in papermakers felts including asbestos cement and pipe felts can be handled by transferring non-papermakers needle felts from Drycor to Westerly and using the Drycor needle looms largely for papermakers felts, provided plan A or B undertaken at Westerly.

7. Asbestos Sheathing & Millboard

Capacity is adequate through 1971 for present product line. Entry into the gasket field will require an expenditure of \$100,000 for calendering and finishing equipment.

C. DETROIT FABRICATING PLANT

Our lease expires in late 1969 and we cannot renew. If we are unable to lease another suitable building, purchase may be necessary.

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TABLE I
PRESENT PLANTS, CAPACITIES AND MAJOR PRODUCT CLASSES

Plant & Location	<u>Maximum Annual Capacity</u>		Sales Dollar	Type of Felt & Major Product Classes
	Carded Pounds	Finished Pounds		
Glenville Mill Glenville, Ct.	3,550,000		\$5,300,000	Cattle hair felt for plate glass polishing, pressed wool felt for lubricating wicks, pianos, foot- wear, pads, optical polishing, seals, marking pen components and fabricated parts for the automotive and railroad industries.
Franklin Mill Franklin, Mass.	2,500,000		4,500,000	Pressed wool felts for apparel, linings, footwear, filter media, pads and seals.
Newburgh Mill Newburgh, N.Y.	5,000,000		5,800,000	Pressed wool felts for apparel linings, tailor trim, filter media, filter products, respirators and fabricated parts, Windsor fiber bonded felts and Feutron needle loomed felts for filter media and filter products.
Westerly Mill Westerly, R.I.	3,000,000*		3,750,000**	Feutron needle loomed felts for filter media, filter products, marking pen components and miscellaneous pads.
Drycor Felt Co. Staffordville, Ct.		320,000	1,600,000	Drycor needle felts for paper- making and the asbestos cement industry, needle loomed felts for filter media.
Glenville Fab. Division Glenville, Ct.			5,100,000	Fabricated felt parts from pressed wool felts and Feutron needle loomed felts.
Detroit Fab. Division Detroit, Mich.			4,200,000	Fabricated felt parts from pressed wool felts and Feutron needle loomed felts.
Erie 16th St. Erie, Pa.		19,500 tons	4,950,000	Dry asbestos felt for roofing and pipeline products, impregnated flooring and Tedlar base, gasketing and commercial papers & millboard.

* Needled yards.

** Newburgh Mill Feutron sales of \$650,000 per year is included in Newburgh Mill figures.

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TABLE II

CAPITAL EXPENDITURES FOR ADDED PLANT AND EQUIPMENT TO MEET PROJECTED SALES

	<u>1969</u>	<u>1970</u>	<u>1971</u>
1. Pressed Felts			
Hair Felts	-	-	-
Piano Felts	-	-	-
Roll, Sheet & Filter Felts	92,000 ¹		
2. Feutron Felts - Plan (A)	265,000 ²	115,000 ³	120,000 ⁴
Plan (B)		3,500,000 ⁵	
3. Windsor & Bonded Fabrics	-	-	-
4. Fabricated Compounds	-	-	-

(1) Expand #5 card at Franklin.

(2) Land, building and a Bywater loom at Westerly.

(3) Compact card and Bywater loom at Westerly.

(4) Compact card and miscellaneous equipment at Westerly.

(5) Plans to consolidate Westerly, Drycor and Newburgh Feutron - 1969-1971.

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5. Filter Products

	<u>1969</u>	<u>1970</u>	<u>1971</u>
Cartridges	-	-	-
Calibrated Bags	10,000 ⁶	-	-
Molded Products	-	-	-
Fabricated Products	500,000 ⁷	50,000 ⁸	50,000 ⁸
6. Drycor	-	-	-

(6) Serving machines est. at Glen. Fab. Plant.

(7) Bldg. & Filter adaptor line at Newburgh.

(8) Misc. Fab. Prod. in development.

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THREE YEAR MANUFACTURING PLAN

1969 - 1970 - 1971

IP DIVISION - GRANULES

Manufacturing Planning

Based on sales estimates, all granule plants, with the exception of Annapolis, will have sufficient production capacity through 1971. Under present conditions, Annapolis will be short approximately 10,000 tons for the year 1969. This, however, should be absorbed in normal productivity increases. In 1970, the Annapolis plant will be short approximately 40,000 to 50,000 tons of capacity and additional equipment will have to be installed and operating, if these sales forecasts develop. By 1971, this plant will be short an additional 40,000 to 50,000 tons of granules and expansion will have to have been completed in order to meet the expected sales forecast.

The following tables show a comparison between sales forecasts and capacity of the four colored granule plants. The natural slate plants, Delta and Fairmount, have sufficient capacity to meet their forecasts.

TABLE #1

FOUR COLORED GRANULE PLANTS

GRANULES

<u>PLANT</u>	<u>1971 SALES FORECAST</u>	<u>1971 CAPACITY</u>	<u>PRESENT CAPACITY</u>
Annapolis	285,000 tons	290,000 *	170,000
Bound Brook	125,000	145,000	130,000
Charmian	175,000	190,000	175,000
Kremlin	<u>205,000</u>	<u>225,000</u>	<u>200,000</u>
TOTAL	790,000	850,000	675,000

* Includes major expansion of approximately \$4,000,000.

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CHARNIAN PLANT

Production Planning

The sales forecast indicates that this plant will have sufficient capacity to meet the expected volume through 1971. This will be accomplished by normal year to year improvements in production through-put and should require no major expansions. The requirements for filler and TCM remain fairly stable. These are a function of granule production and capacity increases as granule capacity increases.

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DELTA PLANT

Production Planning

Granule requirements from the Delta plant are greatly exceeded by the production capacity. Therefore, no major changes are planned in the processing equipment over the next 3 years. Some upgrading, however, of existing old equipment will have to be done.

A major existing problem is that of dust control and air pollution. Correction of the dust conditions must be made if we are to continue to operate the Delta plant. This plant has a history of high compensation liability because of silicosis. Compensation claims will continue until the dust condition is corrected. Unfortunately, the solution to the problem is not simple. The dust collection equipment at Delta is both ancient and inadequate. To properly clean up the atmosphere to protect the health of employees will require replacement of the dust collection equipment. This will require a capital investment of approximately \$200,000.

I would expect with the proper selection and installation of dust collection equipment, the air pollution problem will automatically be solved.

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FAIRMOUNT PLANT

Production Planning

The Fairmount plant has more than sufficient capacity to handle the estimated sales forecast through 1971. This is due to the reduced requirements for natural greenslate granules as butt material and the highly competitive situation throughout the country on headlap granules. The only capital expenditure planned for this plant will be the normal replacement of heavy equipment.

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KREMLIN PLANT

Production Planning

Production capacity at the Kremlin plant should be adequate to meet the sales estimate through 1971. The coloring department is in good operating condition and should be able to handle the requirements of the sales forecast. Through-put will be increased with the change of the aerator equipment and should be high enough to handle an increase in product line. Should the increase in product line develop, additional finished product storage will be required.

We have investigated the conversion of our firing equipment from oil to natural gas. This would result in a reduction of fuel and pigmentation costs. However, negotiations which have been under way for the past several years have not borne fruit. It is anticipated that the gas fuel will not be available until late 1969 or 1970.

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QUARRY RESERVES AND DEVELOPMENT

Present quarry reserves are estimated as follows:

Annapolis Plant	-	150 years plus	- proven
Bound Brook	-	No quarry	- 13 years remaining on a 15 year purchase contract.
Charmian	-	50 years	- proven
Kremlin	-	30 Years	"
Delta	-	50 years	"
Fairmount	-	50 years	"

Exploration programs are started whenever the known reserves approach a 15 year level. Five year development programs have been planned at each of the plants. These are reviewed annually and extended for the following 5th year. Stripping and barren removal costs are based on these 5 year programs. Expenditures are made yearly and designed to maintain available rock one year ahead of production requirements. Periodic core drilling programs are carried on to determine problem areas within the quarry reserves. A small portable core drilling unit has been obtained and this is now being used to define in more detail any problem areas that may exist. No major quarry problems are anticipated in the next 3 to 5 years.

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MANPOWER DEVELOPMENT

During 1968, many changes were made in the management organization throughout the granule group. This was caused by normal attrition, plus the creation of the new Industrial Products Division. Three employees were promoted to the position of Plant Manager, two employees promoted to the position of Mill and Crushing Superintendents and one employee to the position of Coloring Superintendent. With the high proportion of men new to the management positions, the proper evaluation of the personnel cannot be made at this time. It is felt that a good deal of potential within the division still exists and individual ratings will have to be made at a subsequent date.

Our present weakest area, as it has been for sometime, is that of Plant Engineer. A concerted effort will have to be made in this area as well as in all areas to introduce new people with potential for filling future management positions at divisional level.

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THREE YEAR MANUFACTURING PLAN

1969 - 1970 - 1971

IP DIVISION - ASBESTOS FIBERS

Manufacturing Planning

The sales of asbestos fibers are limited to 40,000 tons per year.

This is the maximum production capacity of the asbestos plant.

Increasing plant production would require:

1. Improvement of the present production facilities.
2. Increasing or expanding the present production capacity.
3. The development of new ore deposits at some other location.

The economics of the first 2 plans depend entirely on the extent of the present ore body. Increased production capacity would, of course, more rapidly deplete the existing reserves.

Ore Reserves

At the present production level of 40,000 tons, we have proven ore reserves of approximately 10 years. In addition, we have geological indications that other ore exists, although not proven, and at one time it was thought there could be approximately 10 years' supply. Unfortunately, this has not prove to be true. During 1966-67-68 considerable exploration and development work was done but nothing was discovered that could be moved into the proven reserves. Indications are that there may not be any appreciable amount that will be moved into proven reserves. Our development drilling program will continue but it is estimated that no more that one year's supply will be added to the proven reserves over the next 3 year period.

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IP DIVISION - ASBESTOS FIBERS (Cont.)

Improving Present Production Facilities

Some experimental work under an Engineering Research Authorization was carried out during 1968 in an attempt at beneficiation. However, so far the results have been unsatisfactory. A successful beneficiation process would increase production possibly by 25% or more. It would, however, serve only to more rapidly deplete the present ore reserves.

Some work is being done at the plant in an attempt to recover some of the fibers from the tailings. If a successful method is found, this would increase production. However, it would be in the short fiber range.

Expanding Present Production Facilities

To expand the facilities for a major production increase would require a high capital expenditure. It is estimated that a 50% increase could be gained at the cost of about \$1,500,000. A 100% increase could be gained with an expenditure of about 4,000,000. Justifying this expenditure is not possible with the existing proven ore reserves.

Exploration of New Deposits

The asbestos fiber department has been actively pursuing the possibility of acquiring new undeveloped asbestos fiber deposits. Exploration work carried on both in the United States and Canada has not turned up any promising possibilities. The exploration work should be continued and probably be accelerated in view of our present declining reserves.

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IP DIVISION - ASBESTOS FIBERS (Cont.)

Personnel Planning

There are no plans at present to make any changes in the supervisory personnel in the production area of the asbestos fiber department over the next 3 years. A replacement of the plant engineer, due to retirement will have to be made during this period.

Success in obtaining a new ore body and/or construction additional production facilities may require an increase in our personnel. An expanded exploration program might possibly call for additional geologists.

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