

PLAINTIFFS
EXHIBIT
PACO-220

Ethyl
CORPORATION

ANNUAL REPORTS TO SHAREHOLDERS

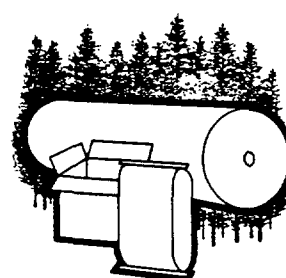
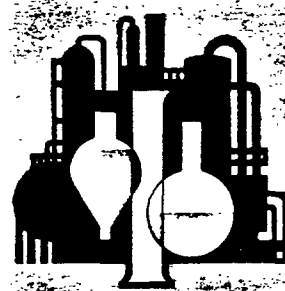
1963 TO 1966

ETC 16801

ETHYL CORPORATION ANNUAL REPORT



Albemarle



FOR THE YEAR ENDED MARCH 31, 1963

ETC 16802

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Annual Meeting

The annual meeting of Ethyl Corporation stockholders will be held in Richmond, Va., on Thursday, May 23, 1963. A formal notice of the meeting, together with a proxy statement and proxy form, has been mailed to stockholders.

Stock Transfer Agents

First and Merchants National Bank, Richmond, Va.

General Counsel

Hunton, Williams, Gay, Powell & Gibson, Richmond, Va.

Executive Offices

330 South Fourth Street, Richmond, Va.
100 Park Avenue, New York 17, N. Y.

ETHYL CORPORATION ANNUAL REPORT FOR THE YEAR ENDED MARCH 31, 1963

FINANCIAL HIGHLIGHTS

Fiscal Year Ended March 31

	1963 ⁽¹⁾	1962 ⁽²⁾
Net Sales	\$ 99,814,250	\$48,578,227
Taxes on Income	4,455,000	1,719,051
Net Income	4,380,731	1,762,266
Cash Flow	12,117,007	4,211,875
Net Income per Share of Common Stock ⁽³⁾	3.79	1.47
Cash Dividends:		
Preferred Stock	283,488	250,388
Common Stock	554,701	509,143
Earnings Retained in Business	3,542,542	1,002,735
Depreciation, Depletion and Amortization	6,555,892	2,294,903
Capital Expenditures	4,838,805	4,820,189
Total Assets	284,909,145	46,925,252
Working Capital	63,000,811	10,313,111
Book Value per Share of Common Stock	31.86 ⁽⁴⁾	20.10

(1) 1963 figures include four months of combined operations.

(2) 1962 figures include Albemarle operations only.

(3) Based on the average number of shares outstanding in each year.

(4) Includes addition to capital surplus of \$9.37 per share resulting from sale of warrants. See Note 10 in Notes to Financial Statements.

To Our Shareholders:

The past fiscal year was a historic one for your Company. The Company began the year, its 76th, as Albemarle Paper Manufacturing Company. It ended the year as a company of greatly expanded size, engaged in both the chemical and the paper businesses, under a new name. The events that accomplished this transformation were, of course, the acquisition of Ethyl Corporation, its merger with Albemarle and the formation of a new organization.

Developments leading to the acquisition of Ethyl go back several years when the Albemarle management became concerned by the inroads being made by plastics in the paper business. Because of this trend, it was decided to make a search for companies in the chemical and plastics field which might be acquired by Albemarle. In the course of this search it was learned that it might be possible to acquire Ethyl Corporation, owned jointly by General Motors Corporation and Standard Oil Company (New Jersey).

This development opened up the opportunity to acquire a major chemical business with a base for entering into plastics. Ethyl is a major manufacturer of antiknock compounds for gasoline and has a growing business in other chemicals. It also is a major producer of vinyl chloride monomer and has devoted considerable research to the development of polymers, basic materials in the manufacture of plastic products.

Plans for the acquisition were approved at a special meeting of stockholders on November 12, 1962. Ownership of all of the outstanding stock of Ethyl Corporation was acquired on November 30. The two companies were merged and the name of the combined company became Ethyl Corporation, incorporated in Virginia. Under the new organization, Ethyl, as the parent company, conducts the chemical operations, while paper production and converting operations are conducted by certain subsidiaries, principally Albemarle Paper Manufacturing Company.

Members of the former Ethyl organization have remained with the Company and their knowledge and experience insure the continuation of efficient operation of chemical activities. The management of the Company represents a combination of executive personnel from both the former Albemarle and the former Ethyl organizations.

Extensive financing was involved in carrying out the acquisition. Details of this financing are discussed under the heading "Acquisition of Ethyl Corporation and Long-Term Debt" in the Financial Review section of this report. The cash flow under the new capitalization of the Company is expected to provide ade-



Members of the Board of Directors (from left around table) are: Lewis F. Powell, Jr., Bruce C. Gottwald, Joseph A. Costello, Malcolm P. Murdock, Robert T. Marsh, Jr., George F. Kirby, B. B. Turner, Floyd D. Gottwald, Floyd D. Gottwald, Jr., William R. Perdue, Jr., S. Douglas Fleet, Frank A. Howard, S. Buford Scott, Edward L. Shea and Joseph M. Lowry.

quately for debt retirement and to make available substantial sums for capital investment.

The sale of warrants to purchase 400,000 shares of common stock of the Company at \$27.50 per share was necessary in connection with the sale of \$50,000,000 of 20-year subordinated notes. The warrants may be exercised at any time during the next 20 years. When exercised, they will cause some dilution of common stock equity, but this dilution is considered relatively small in the light of the increase in the per-share earnings of the presently outstanding shares that was accomplished by the acquisition of the chemical business. Upon full exercise of the warrants, \$11,000,000 additional capital will be paid into the Company.

In accordance with the plan adopted by the stockholders on November 12, 1962, restricted stock options have been issued to key personnel, including officers who are also stockholders and members of the board of directors. Up to March 31, 1963, options for the purchase of 134,500 shares of Class B Common Stock of the Company had been issued (out of 150,000 shares authorized under the Stock Option Plan approved by the stockholders). The options are exercisable over periods up to 10 years. Prices at which they may be exercised vary, depending on the market price at date of issue of option, the lowest being \$56.50 per share. Upon full exercise of these outstanding options, \$8,118,750 additional capital will be paid into the Company.

Today, the combined Company makes a number and variety of chemical and paper products which are listed on page 17 of this report. It is expected that these products will be the basis for expansion and diversification for both chemi-

cal and paper operations, while the Company continues to emphasize its antiknock compound and kraft paper businesses.

Since the all-time high year of 1956, the profitability of the antiknock compound business has been reduced as a result of decline in overall demand and declining prices. As a result, the profits of the former Ethyl Corporation were, at the time of acquisition, considerably below those of previous years. This was a factor in the negotiation of the purchase price paid for that corporation. The decline in consumption of antiknock compounds now appears to have ended and an increase in demand occurred in 1962. At the same time, competitive pressures continue to be vigorous.

In the Company's paper business, product prices suffered one of their greatest declines during the last fiscal year. Profits for the first two quarters compared favorably with previous years, but profits in the last two quarters suffered unexpectedly from the price decline. Some firming of prices is already evident, and it is hoped that the chaotic price situation of last year will not be repeated. Efforts are constantly being made to upgrade the Company's paper production to provide improved profit margins.

Besides the acquisition of Ethyl Corporation, the year was highlighted by Albemarle moving into its new office building in Richmond.

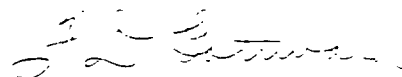
The fiscal year ended March 31, 1963, is made up of eight months of paper operations (April 1, 1962 to November 30, 1962) and four months of combined paper and chemical operations (December 1, 1962 to March 31, 1963). Earnings per share for the fiscal year, based on the number of Class A and Class B Common Shares outstanding, amounted to \$3.79 per share, after 20¢ per share effect of non-recurring expenses in connection with recapitalization. The Company is considering changing its annual accounting period to a calendar year basis.

Management has received numerous requests from stockholders and others for earnings figures for the combined operation that may be used for comparison purposes and as an indication of annual earnings. Past earnings of the two companies are not meaningful because of substantial changes in debt structures and capitalization made in connection with the acquisition on November 30, 1962. Earnings for the first quarter of 1963 were \$2,753,000 or \$2.26 per share. Historically, there is a seasonal variation in antiknock sales and such sales in the first quarter are less than 25 percent of annual sales. After adjustment for seasonal and other factors, it is estimated that the first quarter results would represent, on an annual basis, earnings of approximately \$10 per share.

We would like to express to employees, customers, suppliers and stockholders appreciation for their outstanding support during this eventful year.



President



Chairman of the Board

Financial Review

Sales and Marketing

Net sales of the Company and its subsidiaries for the fiscal year ended March 31, 1963, increased from last year's \$48,578,227 to \$99,814,250. The increase is attributable to the inclusion of four months operations of the new chemical business (Ethyl Corporation, Delaware) acquired from General Motors and Standard Oil Company (New Jersey) on November 30, 1962.

For several years prior to 1962, the overall consumption of antiknock compounds in the United States had been decreasing. From the peak year of 1956, until 1961, the total decline was about 10 percent and was due to a number of factors. Usage of antiknock compounds in aviation gasoline was reduced substantially by the shift to jet aircraft which do not use gasoline. Consumption also was affected by the increase in the number of compact cars using lower octane motor fuel. The extensive development of catalytic reformers in 1955 and subsequent years and the relatively low operating rate of domestic refineries also contributed to the decline. In addition, Ethyl's sales volume was adversely affected by a decision not to join with a major foreign customer in constructing a joint production facility.

However, there are indications that substantially all of the impact of these factors had been felt by 1962. Total domestic demand for antiknock compounds increased that year and is expected to rise further during the next several years.

While the demand is increasing, the antiknock compound market is growing more competitive, with established suppliers stepping up sales efforts and new producers entering the field.

In the face of this competition, Ethyl, the original and best-known marketer, continues to enjoy a strong basic position

in the antiknock compound industry. The Company's reputation for providing customer oil refiners with dependable on-time delivery of consistently high-quality products and its program of valued services—presented by experienced representatives—strengthen this position.

With the increased consumption of petroleum products of all kinds and the more widespread use of additives in these products, Ethyl's sales of additives, other than antiknock compounds, to the petroleum industry increased five percent over the preceding year.

Sales of vinyl chloride monomer, which is used in the manufacture of modern plastics, continued at a high rate.

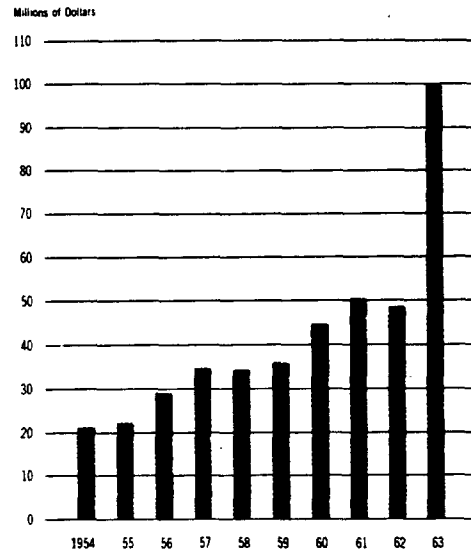
All of the coming year's production of caustic and chlorine, made in the new unit at Baton Rouge, is either committed for use in chemical manufacturing operations there or has been sold. Satisfactory progress was made in the sale of other chemicals made by the Company for use in rubber, plastics, chemical and other industries.

In Canada, demand for antiknock compounds was higher than during the preceding year. Ethyl Corporation of Canada Limited, a wholly-owned subsidiary, which devotes its manufacturing activities to the production of antiknock compounds, increased its 1962 sales dollar volume substantially.

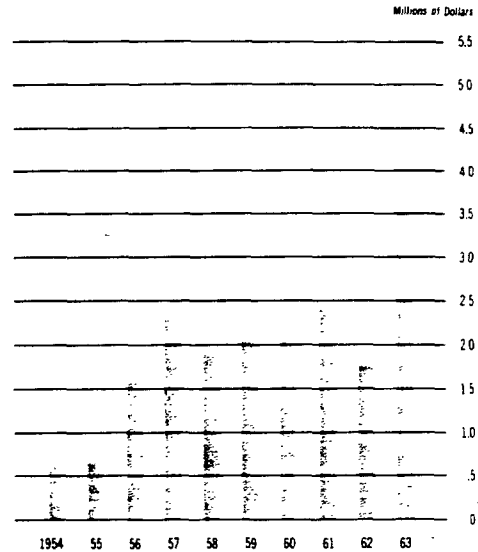
Overseas, chemical products were sold in 63 foreign countries and sales are increasing.

In the kraft paper industry, competition continues to be very keen, but there is now some indication of a trend toward improved prices. Not only have prices of the Company's kraft papers been under pressure most of the year, but the prices of converted products also have been hard

Net Sales Year ended March 31



Net Income Year ended March 31



hit. The latter include multiwall shipping sacks, shopping bags, corrugated shipping containers, waterproof and waxed papers, which have all been victims of a price decline of unexpected severity and duration.

Prices of blotting and absorbent specialties have held firm. The number of orders for saturated papers is the largest in the Company's history and it is anticipated that this phase of the business will enjoy a good year.

Interstate Bag Company, a subsidiary engaged in manufacturing shopping bags, increased unit and sales volume substantially for the year, with earnings holding steady. New styles were added to the Carryall® shopping bag product line. Sales and engineering staffs have been reinforced for dealing with new market conditions to provide technology to maintain leadership position in this highly competitive field.

Earnings

Earnings increased from \$1,762,266 last year to \$4,380,731, due to the inclusion of

four months operations of the new chemical business. The fiscal year ended March 31, 1963 is made up of eight months of paper operations (April 1, 1962 to November 30, 1962) and four months of combined operations (December 1, 1962 to March 31, 1963).

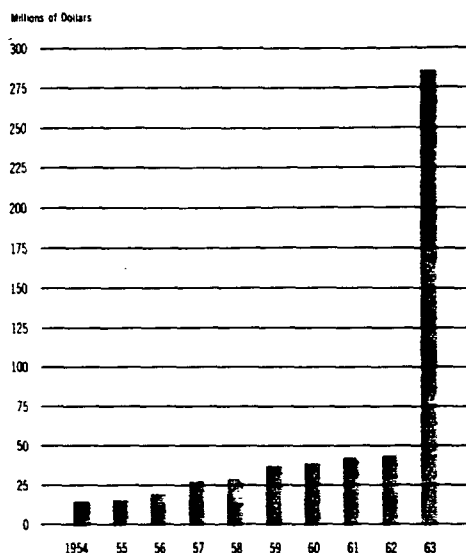
This year's earnings were charged with the following nonrecurring expenses:

Premium on Prepayment of \$13,000,000 First Mortgage Bonds—Debt of Old Albemarle, Refinanced	\$292,500
Unamortized Balance of Mortgage and Debt-ture Expense	147,593
	<u>\$440,093</u>

In addition, there were charges representing expenses incurred in connection with the new financing which have been paid, but are being amortized from earnings over a period approximating the life of the indebtedness. During the last four months of the year, amortization of these charges was as follows:

Financing Expenses	\$ 34,724
Appraisal and Other Expense	15,493
Note Discount	194,784
Total	<u>\$245,001</u>

Total Assets Year ended March 31



On an annual basis, these items will involve charges against earnings of approximately \$735,000 (which are deductible for taxes), but will not require any future cash expenditure.

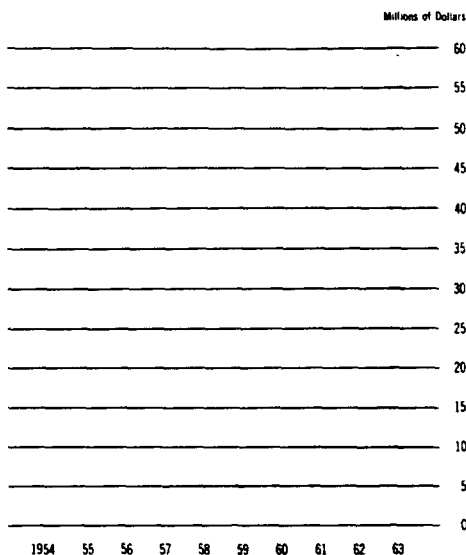
**Convertible Debentures,
Capital Stock and Dividends**

During the year, \$2,522,300 principal amount of debentures were converted into 157,688 shares of Class B Common Stock, thus bringing the total outstanding Class A and Class B Common Stock to 1,187,362 shares at March 31, 1963.

Warrants to purchase 400,000 shares of Class B Common Stock of the Company were sold to the purchasers of the \$50 million face amount of Subordinated Notes due 1979-1982.

In accordance with the plan adopted by the stockholders on November 12, 1962, restricted stock options to purchase 134,500 shares (of a total authorized of 150,000) of Class B Common Stock of the Company were issued to key personnel up to March 31, 1963.

Working Capital Year ended March 31



Cash dividends totaled \$838,189 for the year—50¢ per share on Class A and Class B Common Stock and \$6 per share on the Cumulative Preferred.

As required by the Sinking Fund, \$205,900 par value of Preferred Stock was retired during the year. The Treasury Stock (1,018 shares) as shown in the March 31, 1963 balance sheet will be used to satisfy, in part, the 1963 Sinking Fund requirements.

**Acquisition of Ethyl Corporation
and Long-Term Debt**

On November 30, 1962, culminating some months of negotiation, the chemical business was acquired by Albemarle Paper Manufacturing Company by the purchase of all of the outstanding shares of Ethyl Corporation (a Delaware corporation) capital stock for a price of \$116,366,264 and by the assumption of substantial liabilities. On the same day, the former Ethyl Corporation was merged into Albemarle Paper Manufacturing Company and the name of the surviving corporation was changed to

Ethyl Corporation (a Virginia corporation).

A total of \$200 million was borrowed to finance the acquisition, to refinance certain of the debts of the combined companies and to provide additional working capital.

The following table shows the items for which the debt was incurred:

Paid to General Motors and Standard Oil Company (N. J.)	\$116,366,264
Payment of Bank Loan which was Assumed on Purchase of Chemical Business	43,000,000
Payment of Albemarle Mortgage Debt	13,000,000
Increase in Working Capital	27,633,736
Total New Debt	200,000,000
Debt of Canadian Subsidiary Assumed on Purchase of Chemical Business	7,361,074
Total Debt at November 30, 1962	207,361,074
Less:	
Current Year Prepayments	2,079,924
Portion of Debt Due Within a Year, Included in Current Liabilities	8,905,831
Long Term Debt at March 31, 1963	<u>\$196,375,319</u>

The \$43 million bank loan shown above was obtained in November 1962, to permit the payment to the former stockholders of Ethyl of the entire earned surplus of the

corporation as of October 31, 1962, prior to the sale of its capital stock to Albemarle on November 30, 1962.

As shown in the table above, \$200,000,000 of new debt was incurred, and \$7,361,074 of existing debt was assumed. The separate borrowings which constitute the total debt together with the names of the lenders are shown in an accompanying box entitled "Summary of Long-Term Debt".

Warrants to purchase 400,000 shares of Class B Common Stock of the Company at \$27.50 per share were issued with the \$50 million face amount of 5 $\frac{3}{4}$ % Subordinated Notes Due 1979-1982.

The proceeds of sale of the units were allocated as follows:

	Each \$1,000 Unit	Total Units \$50,000,000
Notes	\$ 777.48	\$38,873,934
Warrants for 8 Shares	222.52	11,126,066
Total Proceeds	<u>\$1,000.00</u>	<u>\$50,000,000</u>

The proceeds of sale of the Warrants of \$11,126,066 were added to the capital of the Company and a like amount was recorded as discount on the sale of the notes.

The discount will be amortized over the twenty-year period of the notes and is deductible for income tax purposes, thereby resulting in an average reduction in income taxes of approximately \$300,000 per year.

The cost of the assets acquired in the merger with Ethyl is made up of the following:

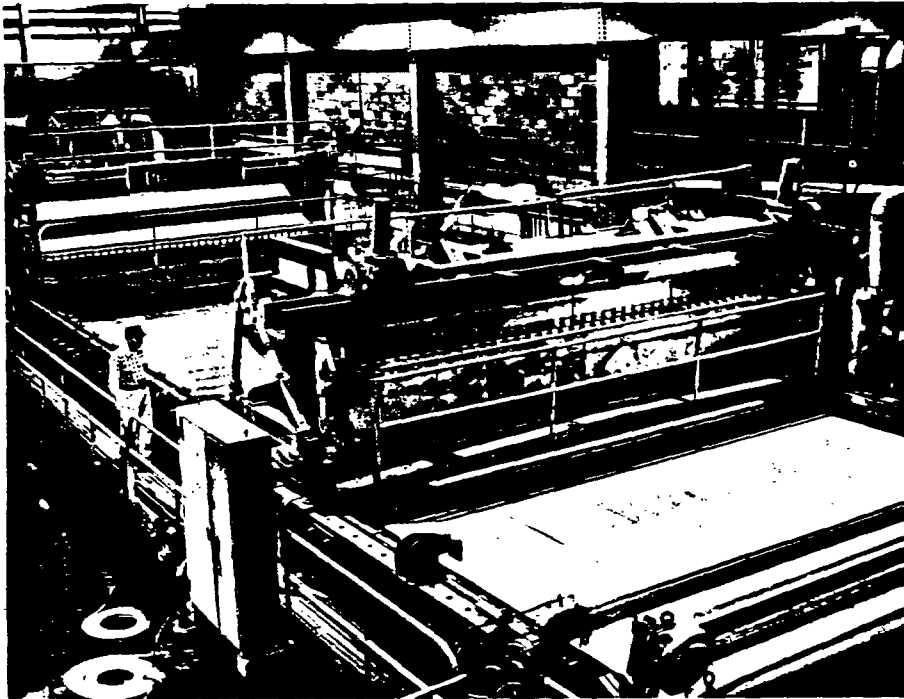
Amount Paid for Stock	\$116,366,264
Liabilities Assumed	73,585,552
Total Cost	<u>\$189,951,816</u>

The assets were appraised by The American Appraisal Company and C. F. Braun & Co. On the basis of the appraisal, the total cost as of November 30, 1962 was allocated as shown below:

	Cost Allocated to Assets
Property, Plant & Equipment	\$123,582,800
Inventories	20,326,877
Stock of Affiliates	6,019,720
Patents, Contracts & Other Intangibles	9,633,943
Cash and Cash Items	30,388,476
	<u>\$189,951,816</u>

Summary of Long-Term Debt

5 $\frac{1}{2}$ % Bank Loan—Due \$8,000,000 Annually 1963-1964	\$ 16,000,000
The Chase Manhattan Bank	
5 $\frac{3}{4}$ % Senior Notes—Due \$8,000,000 Annually 1965-1978	114,000,000
The Prudential Insurance Company of America	
The Equitable Life Assurance Society of the United States	
The Northwestern Mutual Life Insurance Company	
New York Life Insurance Company	
5 $\frac{3}{4}$ % Subordinated Notes—Due Annually to 1967	20,000,000
(Amounts of Required Annual Payments are Based on Earnings)	
General Motors Corporation	
Standard Oil Company (New Jersey)	
5 $\frac{3}{4}$ % Subordinated Notes with Warrants—Due 1979-1982	50,000,000
Privately Placed with Various Investors	
New Debt Incurred	200,000,000
Debt Assumed	
3 $\frac{3}{4}$ % Guaranteed Notes—Due 1963-1970	7,361,074
Three Canadian Banks	
This debt is owed by the Canadian subsidiary and is guaranteed by the parent company	
Total Debt at November 30, 1962	207,361,074
Current Year Prepayments on 5 $\frac{3}{4}$ % Subordinated Notes due 1967 and 3 $\frac{3}{4}$ % Guaranteed Notes	2,079,924
Total Debt at March 31, 1963	<u>\$205,281,150</u>



The new secondary headbox installed on the No. 4 kraft paper machine at the Roanoke Rapids, N.C., mill increases flexibility and production capacity.

Depreciation is based on the estimated lives of the assets as determined by the appraisers. To conserve cash and add to the Company's cash flow in the early years, depreciation on the fixed assets is taken on accelerated methods for Federal income tax purposes only. Income has been charged with the deferred income tax.

The paper manufacturing business and assets of the Company were transferred to a subsidiary, Halifax Paper Company, Inc., which in turn, changed its name to Albemarle Paper Manufacturing Company.

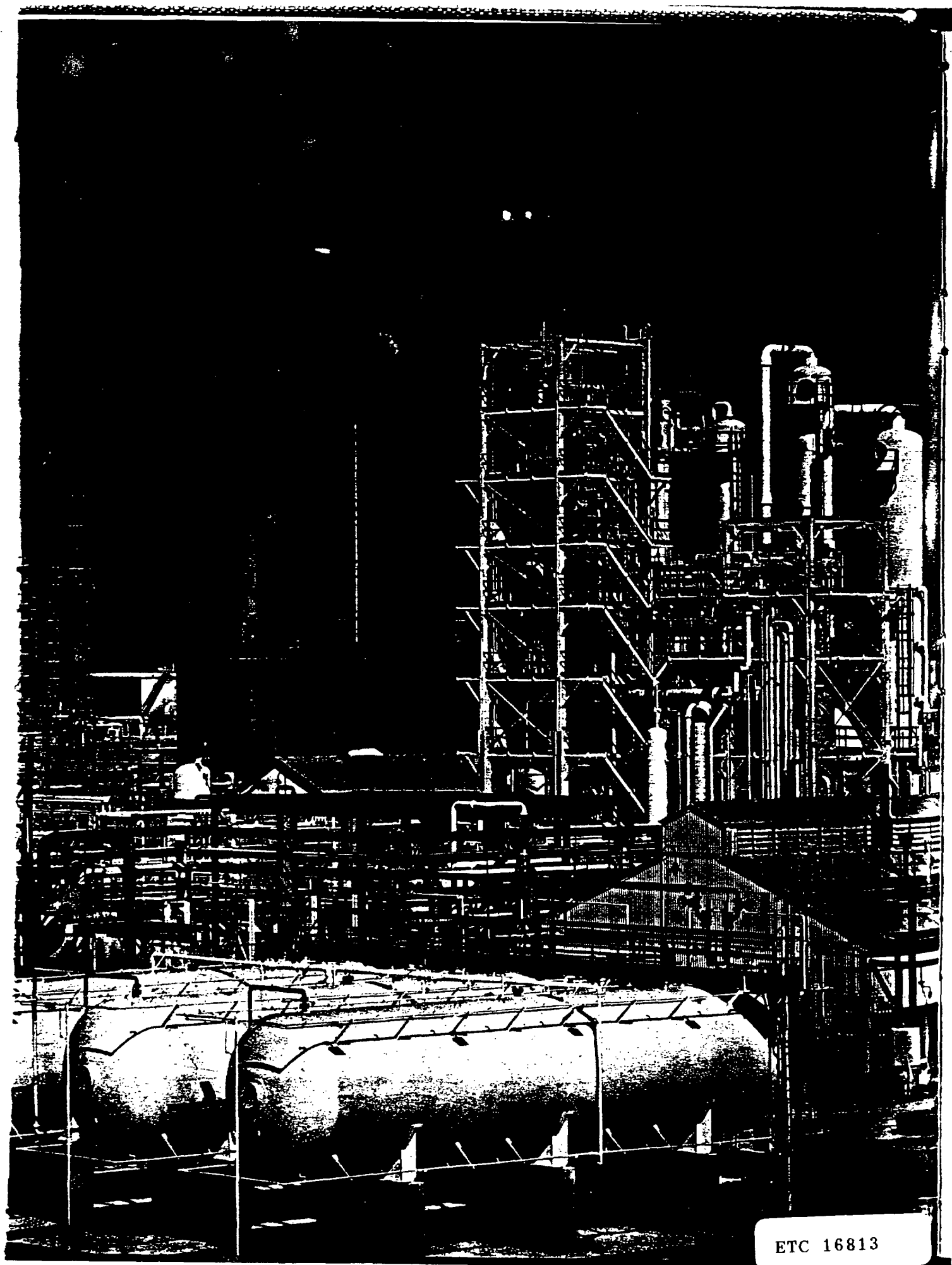
Cash Flow, Source and Disposition of Funds, and Working Capital

The following tabulation shows the source and disposition of funds for the year and also gives a brief breakdown of the cost of the Ethyl (Delaware) stock.

Source of Funds	
Net Earnings	\$ 4,380,731
Depreciation and Other Charges not Requiring Cash Outlay	7,736,276
Total Cash Flow	12,117,007
Sale of Notes and Warrants	200,000,000
	<u>\$212,117,007</u>
Disposition of Funds	
Assets Acquired in Ethyl (Del.) Merger:	
Property, Plant and Equipment	\$123,582,800
Other Assets	35,783,464
Loan Assumed	(43,000,000)
Total Cost of Ethyl Corporation (Del.) Stock	116,366,264
Payment of Debt (includes \$43,000,000 assumed in merger)	58,079,924
Property, Plant and Equipment—New	4,838,805
Dividends	838,189
Increase in Working Capital and Other Uses of Funds	31,993,825
	<u>\$212,117,007</u>

It is estimated that on an annual basis depreciation, depletion and amortization for the calendar year 1983 will be approximately \$15,500,000.

At March 31, 1983, working capital amounted to \$63,000,811. The ratio of current assets to liabilities was \$2.75 to \$1.00.



ETC 16813

Operations Review

Manufacturing

The major efforts in chemicals manufacturing during the year have been directed at improving the operating efficiency of the various plants. This program, a continuation of a similar one in effect for many years, improved the utilization of manpower, materials and facilities and is designed to offset increases in the cost of manhours, certain raw materials, taxes and other operating expenses.

A new caustic-chlorine production unit at the Baton Rouge plant, which partially utilizes some unused facilities not needed for sodium production, was completed and went into operation in January of this year.

Facilities for the production of anti-oxidants and aluminum alkyls were expanded during the year, and new facilities for the production of two missile propellant components were built.

In the manufacture of both pulp and paper, new records, both in quantity of production and in lower costs, were set during the year.

A new secondary headbox was installed on the Number Four paper machine at the Roanoke Rapids, N. C., plant and facilities for heating the water in the wire pit of this machine were completed. This work, together with other improvements in the drying capacity of the machine, increased its production capabilities on certain grades of paper by about 25 percent. At the same time, the work made possible greater flexibility in handling quality grades.

A semi-commercial unit for the production of cast coated bleached paper board, using a process developed and patented by Albemarle, was installed at the Rich-



Salt brine is decomposed into chlorine and caustic cell liquor in electrolytic cells in a new production unit at the Baton Rouge plant.

mond division. Production on this unit is progressing satisfactorily.

Production of waterproof, absorbent, filter and saturated papers showed no significant change from the preceding year.

The first portion of the new Albemarle Container division plant at Odenton, Md., was completed and occupied last summer. The fine layout of this plant—one of the best in the corrugated container field in the Baltimore area—offers a number of advantages.

At the Raymond Bag division, development of a special-purpose bag, incorporating use of plastic coated paper and an inner ply of free plastic films, progressed satisfactorily. In addition, work is going forward on the development of our own plastic films.

At Interstate Bag Company, contemplated additions in machinery and warehousing during the coming year are expected to improve efficiency in the manufacture and distribution of shopping bags and help

Vinyl chloride produced in these facilities at the Baton Rouge plant — and at the Houston plant — is sold in tank-car quantities for conversion into polyvinyl chloride, one of the most widely used modern plastics.

meet the increasing challenges of competition and softening prices.

Pulpwood Supply and Forest Management

Nearly 450,000 cords of pulpwood were purchased to satisfy mill requirements during the year. Of this total, 28 percent, or 125,000 cords, was in the form of chips made from residue at sawmills.

The purchase of pulpwood by weight, initiated at the Roanoke Rapids, N. C., mill last year for all truck-delivered pulpwood, benefits both buyer and seller and is being expanded. As part of this program, two of the Company's 13 mechanized pulpwood buying yards were equipped with scales.

Wood transportation costs continue to rise as a result of increasing railroad freight rates and because increasing mill demands make it necessary to buy pulpwood at greater distances from the mill. To combat these rising costs, efforts are being made to increase the amount of truck-delivered pulpwood.

Tree planting and seeding continued on Company woodland, with about 1,600 acres

reforested during the year. A helicopter was again used in seeding operations.

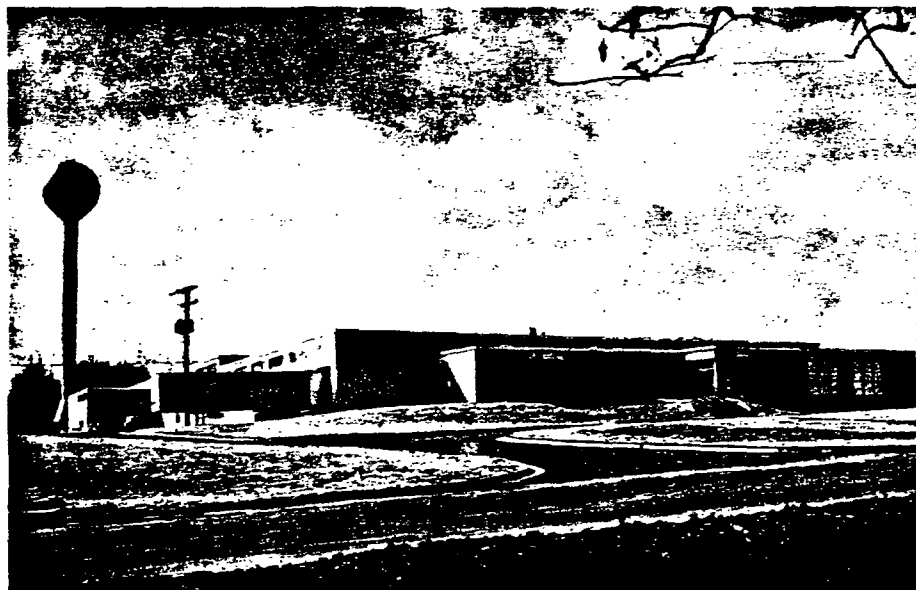
Through a planned cutting program, over 10 percent of round pulpwood requirements was supplied from the 200,000 acres of woodland owned or held under long-term lease by the Company. While Company woodlands are capable of supplying a much greater percent of raw material needs, an excess of growth volume over cut volume is being allowed to accumulate to increase growing stock and provide for additional growth potential in the future.

Since it will be several years before genetically superior seed orchards will be in volume production, an interim program has been initiated to provide improved pine seedlings for reforestation of Company woodlands and for distribution to private tree farmers in the Company's wood procurement area.

Employee and Public Relations

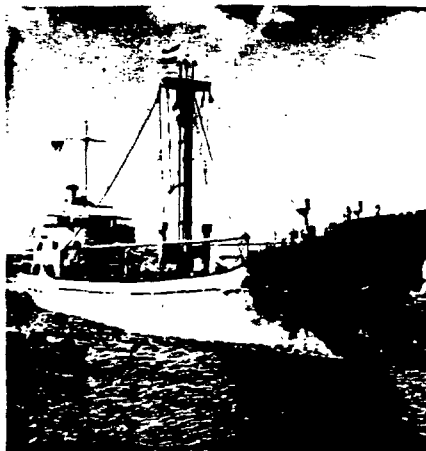
The Company has enjoyed good employee and labor relations and there have been

The first portion of the new Albemarle Container Division plant at Odenton, Md., was completed during the year. It includes an efficient layout offering a number of production advantages.



no work stoppages during the year. Wages, salaries and benefit plans compare favorably with patterns prevailing in the respective industries and areas in which the Company operates. Safety records at all locations continue to be gratifyingly good. At the end of the year, the total number of employees of Ethyl Corporation and its wholly-owned subsidiaries was 6,444.

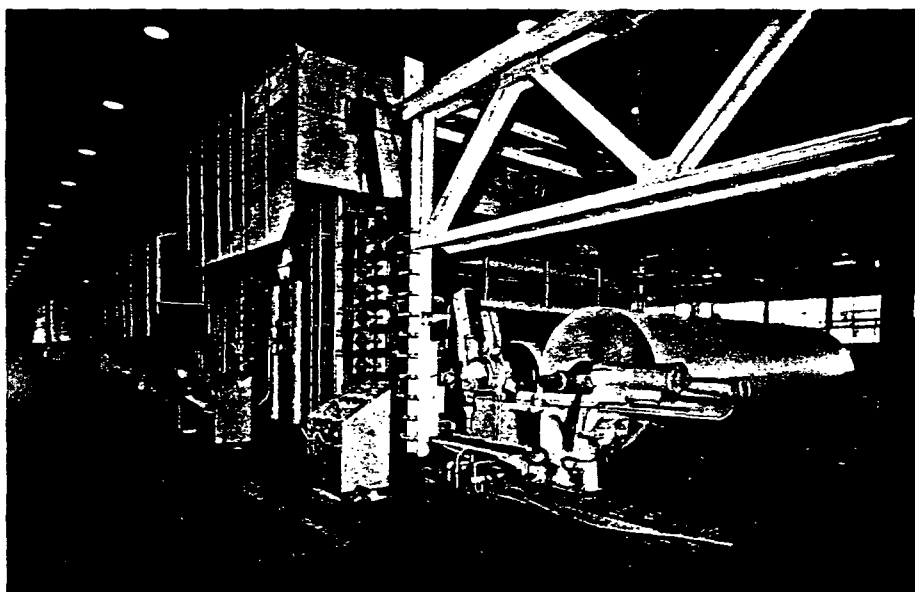
As in the past, public relations also have been good. An open house for employees, their families and the public was held at the new office building in Richmond. Floyd D. Gottwald spoke on "Albemarle, from Pines to Packaging, 75 years of Papermaking Progress" at the dinner in Richmond presented by the Newcomen Society in North America in honor of Albemarle's 75th anniversary. The Ethyl manufacturing center at Baton Rouge commemorated a quarter century of operations with an open house for employees and members of their families and was in turn honored by the citizens of the Baton Rouge area with a dinner and a plaque saluting the Company for "25 years of outstanding community service."



With the Chemical Trader, the Company pioneered in tank-ship delivery of bulk quantities of anti-knock compounds to overseas refiners.

Research and Development

Pursuant to a long-range plan to broaden and diversify its products, a substantial research and development program is conducted by the Company.



Kraft papers produced in mills at Roanoke Rapids, N.C., and Richmond, Va., are used in a variety of household and industrial products.

Chemical research and development were directed to established lines of business during the year and to a number of new areas, in which significant progress was made. Successful work was done on monomers and polymers which have end-product applications in plastics and other uses; on new additives for petroleum products; on a catalyst for the removal of potential smog-forming materials from automobile exhaust gases; and on compounds and techniques for use in vapor plating aluminum and other metals. The catalyst has been accepted for fleet and service-life testing by the State of California.

Several unique new antioxidants—products of Ethyl's patented orthoalkylation process—and a number of new aluminum alkyls were supplied to petroleum, plastics, rubber and chemical companies. Successful research and process development work was carried out on several products in which potential customers foresee large-volume requirements.

Development of processes for the manufacture of additional chlorinated hydrocarbon products advanced significantly

during the year, and these processes are approaching commercialization.

Under Advanced Research Projects Agency, Air Force, Army and Navy contracts, the Company continued research programs and the supply of development quantities of missile fuel components. Facilities were established for supplying development quantities of ingredients for the Polaris missile propellant and contracts have been obtained for expanded effort in 1963 on research and development for propellant ingredients.

Other contract research investigations under way involve: defoliation of jungle vegetation for the Army, air pollution studies for the Public Health Service, fundamental chemical studies for the Atomic Energy Commission, organo-metallic-polymer studies for the Air Force and aviation oil tests for the Navy.

Although the commercial feasibility and the extent of the market for the foregoing products remain subject to various contingencies, management believes that several products of its extensive research and development will make significant contributions to the earnings of the Company.

In paper and packaging, the attainment of a commercial status for the laboratory-developed line of saturated and coated papers was one of the significant contributions of paper research.

Increased emphasis on the development of specialized kraft paper grades during the year resulted in the production and sale of several new grades of kraft paper.

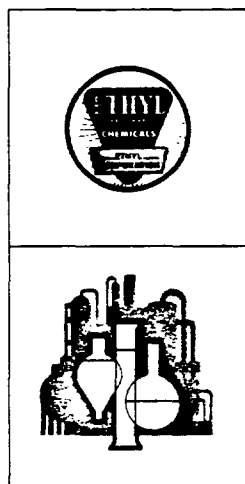
Additional programs related to pulp, paper and packaging processes and products were initiated. Plans have been made to transfer several projects of a purely chemical nature to chemical research and development and to further strengthen the paper, plastics and packaging research and development program.

There were assigned to the Company in the past year 119 U. S. patents and 69 in foreign countries. Patents in force at year end totalled approximately 700 in the U. S. and more than 500 abroad.

Company-owned woodlands are carefully managed to increase growing stock and help supply pulpwood for future mill requirements.



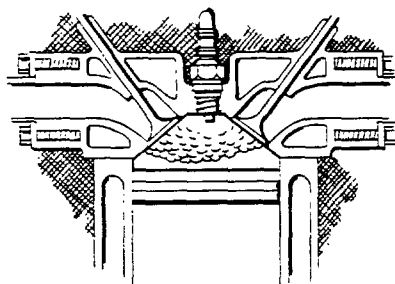
THE ETHYL STORY



UNTIL RECENTLY, ETHYL CORPORATION, A MAJOR CHEMICAL COMPANY, WAS KNOWN PRIMARILY AS AN OUTSTANDING MANUFACTURER AND MARKETER OF ANTINKNOCK COMPOUNDS FOR GASOLINE. THE MAJOR PORTION OF ETHYL'S SALES AND PROFITS CONTINUES TO BE DERIVED FROM ANTINKNOCK COMPOUNDS AND OTHER ADDITIVES FOR PETROLEUM PRODUCTS, AND SUBSTANTIAL ACTIVITIES ARE DIRECTED TOWARD EXPANDING ITS POSITION IN THESE MARKETS.

IN RECENT YEARS, HOWEVER, ETHYL HAS BROADENED ITS FIELDS OF INTEREST AND HAS BEGUN TO PRODUCE OTHER ADDITIVES FOR PETROLEUM PRODUCTS, VARIOUS OTHER CHEMICALS AND ESSENTIAL INTERMEDIATES FOR PLASTICS. ITS DIVERSIFICATION PROGRAM IS RECEIVING INCREASED ATTENTION AND IS DIRECTED TOWARD DEVELOPING NEW CHEMICALS FOR INDUSTRY, CONSUMER PRODUCTS AND NATIONAL DEFENSE.

How "Ethyl" Antiknock Compounds Are Used



"Ethyl" antiknock compounds are used by oil refiners throughout the world to improve the octane quality of gasoline and thereby increase its ability to produce power in internal combustion engines. If octane quality is low, gasoline burns too fast, or explodes, and a condition called

knock results. Knock wastes energy, causes engine overheating, cuts power, limits performance, reduces mileage, and can lead to serious engine damage.

By helping gasoline to burn smoothly and evenly, antiknock compounds provide maximum automotive power and performance, and save motorists

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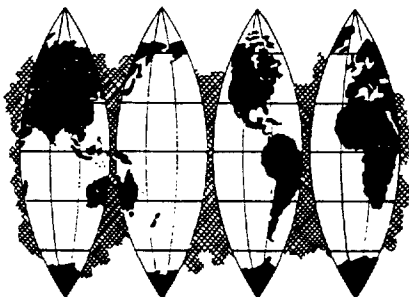
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almost \$2 billion on their annual gasoline bill. By increasing the octane quality of gasoline, the compounds help oil companies to operate their refineries with greater flexibility and economy. They also help conserve an estimated 250 million barrels of petroleum each year by making it possible to produce more gasoline from every barrel of crude oil.

Because the hydrocarbon composition of modern gasoline varies widely—depending upon the crude oil used, the refining processes employed and the final blend of gasoline components—and because of the varying requirements of many late model automobiles, no one antiknock compound is necessarily the best. Accordingly, Ethyl pioneered in, and now offers, a number of antiknock compound formulations.

Ethyl draws on its 40 years' experience to help refiners select the anti-knocks best suited to their particular refining and marketing needs.

Engaged in Far-Reaching Operations



Serving the petroleum and chemical industries throughout the United States and Canada and in many foreign countries, Ethyl engages in substantial activities in this country and abroad. Administrative offices for chemical operations are situated in New York City. Experienced Ethyl

representatives handle product marketing and work closely with customers to help them achieve best results with Ethyl's products.

Ethyl's chemical products are manufactured in modern plants in Baton Rouge, La.; Houston, Texas; Pittsburg, Calif.; and Orangeburg, S. C.; and by a wholly-owned subsidiary, Ethyl Corporation of Canada Limited, in Sarnia, Ontario.

The plant in Baton Rouge is the largest facility in the world for the manufacture of antiknock compounds, and also produces other chemicals. A multi-million-dollar laboratory on the plant is headquarters for the Company's research and development program. The plant also is a center for engineering, purchasing, traffic, accounting, electronic computations and patents.

Modern, well-equipped research laboratories in Detroit concentrate on

projects and products related to the oil, automotive, aviation and farm machinery industries. Gasoline testing laboratories in Yonkers, N. Y.; Tulsa, Okla.; Houston, Texas; Kansas City, Mo.; and Long Beach, Calif., provide a customer and industry service.

Antiknock compounds and other Ethyl products are shipped by rail, tank truck, ship, and on occasion by air. The Company operates a fleet of almost 1,200 specially-designed railroad tank cars to assure customers of an uninterrupted supply of products and of prompt delivery.

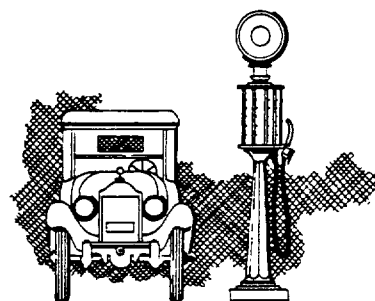
For antiknock compound shipments overseas, Ethyl pioneered in the development of a unique, large-volume, shipping-tank, sea-land service and in bulk delivery in a tanker, the *Chemical Trader*.

Ethyl Corporation of Canada Limited is headquartered in Toronto, and, in addition to operating the only antiknock compound manufacturing plant in Canada, maintains offices and representatives near major refining centers.

Ethyl's Export Division, headquartered in New York, sells Ethyl products in 63 countries around the world.

Company History Starts Before World War I

Ethyl was incorporated in 1924, but its history goes back to the years just before World War I when Charles F. Kettering, the late inventive genius who became the first president of the Company, recognized knock as a barrier to more efficient automobile engines.



Mr. Kettering knew that, by increasing compression ratio, engines could be made to squeeze more power out of gasoline. The trouble, though, was that even the best fuels then available could stand no further squeezing. When subjected to higher temperatures and pressures inside an engine, they ignited in the spontaneous, uncontrolled, power-sapping and potentially damaging explosion known as knock.

Knock studies got under way in earnest in "Boss Ket's" research laboratory in Dayton, Ohio, in 1916, when he assigned the job to young Thomas Midgley, Jr. A mechanical engineer by education and training, Midgley became one of the outstanding chemists of his generation. He served as an

officer of the Company from its founding in 1924 until his death 20 years later.

Early in their research, Midgley and his co-workers established that it is the fuel and not the engine that knocks. But finding a way to prevent the knock was something else again.

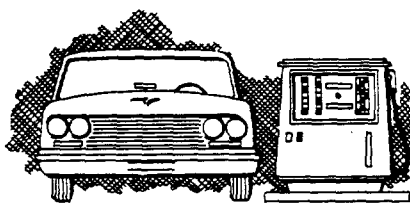
After years of painstaking research, they discovered the antiknock properties of tetraethyl lead on December 9, 1921. One teaspoonful or less in a gallon of gasoline, they found, was sufficient to prevent knock. Fourteen months later, after problems relating to the manufacture, distribution and use of the magic chemical had been successfully met, gasoline containing TEL antiknock compound was ready for public sale.

When "Ethyl" gasoline first went on sale 40 years ago this February, it was available at one pump at one service station of one oil company in one city — Dayton, Ohio. Today, lead alkyl antiknock compounds are used in more than 98 percent of all gasoline sold in the United States and in billions of gallons more sold in the rest of the world. Leaded gasoline is available at 200,000 service stations in this country and thousands of others around the globe.

Company Contributes to Fuel and Engine Progress

Besides manufacturing and marketing quality products, Ethyl provides its customers with an extensive service program. The Company also serves as liaison between the oil and automotive industries in their continuing efforts to provide better fuels and engines. Through close working relationships with oil refiners and engine manufacturers, the Company has been able to help fuel and engine developments to advance in step with each other.

Ethyl's automotive research scientists in Detroit work closely with technical people of the various automobile companies. Motorists and other consumers of gasoline and petroleum products have benefitted from this association in terms of more powerful and economical engines for passenger cars, trucks, buses, tractors, boats and airplanes.



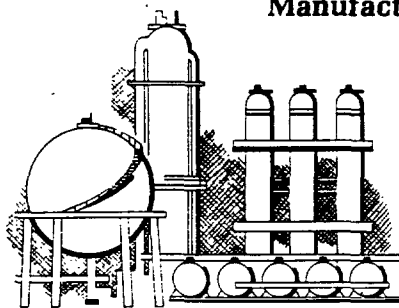
Farmers, for whom Ethyl engineers helped create the modern, gasoline-powered tractor in the mid-1930s, are one of the beneficiaries. In the early '30s, tractors were bulky and cumbersome. Most of them burned kerosene, were low in horsepower and inefficient, and saddled farmers with high repair and maintenance bills.

After several years of missionary work in the field, Ethyl engineers succeeded in bringing about the conversion of farm tractors from low-compression, distillate-burning affairs to economical, high-compression, gasoline-powered workhorses.

Ethyl's interest in farm mechanization continues. In a cooperative program with a leading farm equipment manufacturer a few years ago, Ethyl's research engineers helped create an experimental engine of 12 to 1 compression ratio (in comparison the average compression ratio of current model automobiles is about 9.2 to 1) and demonstrated the economy and practicability of the engine. While not yet commercially available, this "Tractor of Tomorrow" points the way to new gains that lie ahead.

In its postwar development of markets outside the United States, Ethyl, through its products and services, has been instrumental in bringing about substantial improvements in gasoline quality. The average octane rating of motor fuels in most countries in the Free World has risen considerably in recent years and in some nations now compares favorably to gasolines sold in this country. As a result, motorists in those lands are experiencing better engine performance and greater fuel economy.

Manufacturing Know-How Leads to Growth



The manufacture of antiknock compounds is a complex, highly technical process that requires and brings together large quantities of such basic chemicals as chlorine, ethyl chloride, methyl chloride, sodium and ethylene dichloride.

Ethyl has been a leading producer of most of these products for many years. Manufacturing know-how gained in the production of these products—and of antiknock compounds—has enabled the Company to broaden its

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chlorine, ethyl
chloride, sodium
bromide.

products for many
of these products
try to broaden its

operations in the fields of chlorinated hydrocarbons, organometallics and electro-chemistry.

Besides antiknock compounds containing tetramethyl lead and physical and chemical combinations of tetraethyl and tetramethyl lead, Ethyl's newer organometallic products include aluminum alkyls and alkyl aluminum halides. These chemicals are used as components of catalysts important to petrochemical and plastics manufacturing, and they also have potentials as intermediates in the production of other chemicals and as pyrophoric (self-igniting) fuels for the military.

As a leading producer of metallic sodium, Ethyl has in recent years provided technical assistance in exploring the use of this element as a potential heat transfer agent in nuclear power plants and in other modern technical applications.

Ethyl's experience in the complex field of chlorinated hydrocarbons manufacturing enabled it to go into the production of vinyl chloride monomer a few years ago and to become a major supplier of this widely used chemical. From the Ethyl plants at Baton Rouge, La., and Houston, Texas, vinyl chloride monomer is shipped in tank car quantities for subsequent processing into polyvinyl chloride, one of the most popular and versatile modern plastics. Polyvinyl chloride—the finished plastic—is fabricated into floor coverings, upholstery and curtain material, phonograph records, pipe, electric wire insulation, garden hose and a variety of other household and industrial products.

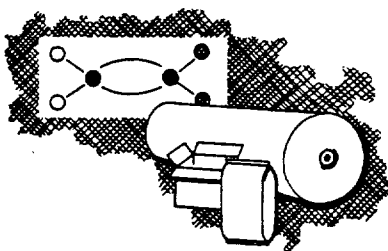
Closely related chemically to vinyl chloride monomer is an even newer Ethyl product, vinylidene chloride monomer. This chemical is processed into polyvinylidene chloride, a plastic used for automobile seat covers, outdoor furniture coverings, and as a coating for paper and paper board in modern packaging.

Ethyl's effective antioxidants—products of the Company-developed orthoalkylation process—have applications not only in fuels and lubricants but also in rubber, plastics, resins, paints and chemicals. "Ethyl" Antioxidant 702, already widely used in the oil industry, recently received interim Food and Drug Administration approval as an "antioxidant in the manufacture of resin used in food packaging." Resins are made into transparent film in which fruits, vegetables, meats, bakery products and other edibles are wrapped.

Besides a variety of antiknock compounds for gasoline, Ethyl markets

many other additives for motor fuel: "Ethyl" Metal Deactivator, to prevent chemical changes caused by certain metals encountered in gasoline storage tanks and fuel systems; "Ethyl" Ignition Control Compounds, to control spark plug fouling and surface ignition; "Ethyl" Multi-Purpose Additive, to improve anti-icing, anti-corrosion and detergent qualities; "Ethyl" Antioxidants, to inhibit oxidation and to control gum formation; and "Ethyl" Oil Soluble Dyes, to provide distinctive coloring.

Further Diversification Planned for the Future



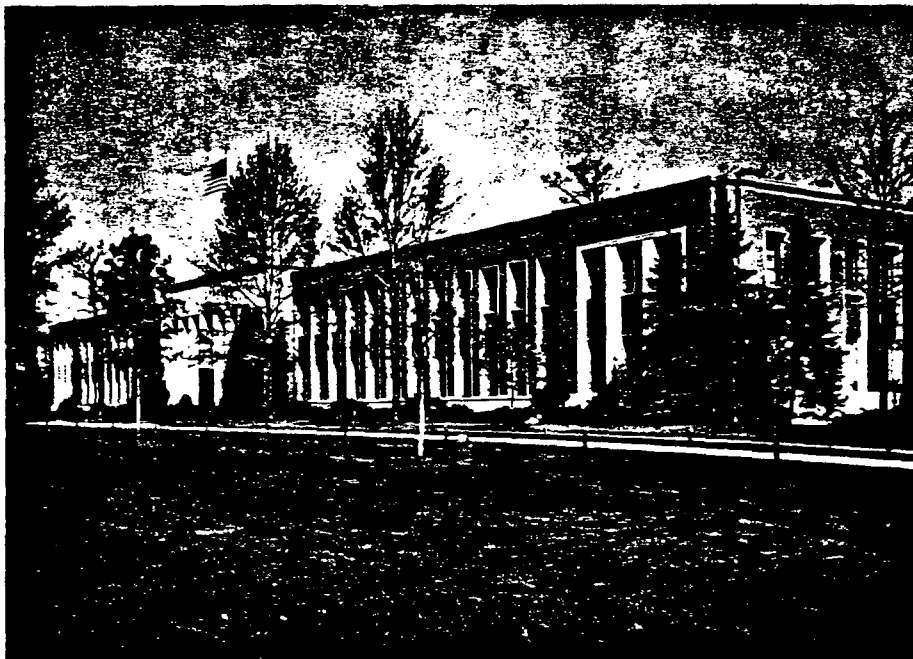
Ethyl is proud of its contributions to progress in the oil, automotive, chemical and related industries and to national defense through its research and its manufacture and marketing of chemical products, and through its program of personalized customer service. From a one-

product company, it is "changing to serve a changing world," with an active program of research and diversification.

As the Company moves ahead in a new era under new ownership, it intends to continue with its established products and services. At the same time, Ethyl plans to intensify its diversification program to create additional worthwhile business. The Company looks forward to extending its investigations into fields and products which can be produced by the new company formed by the merger of Ethyl and Albemarle Paper Manufacturing Company.

The combined Company will benefit from the knowledge and experience of the people in both of its component organizations. The alliance will provide new opportunities for growth in the future.

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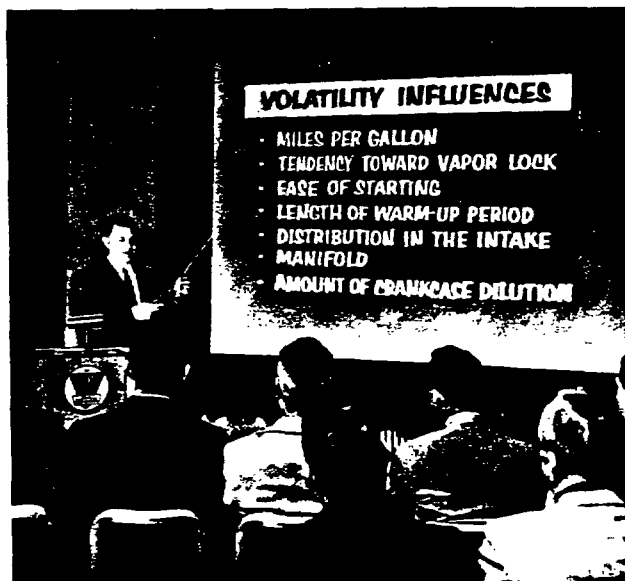


Modern research laboratories in Detroit, above, concentrate on products related to the oil, automotive, aviation and farm machinery industries. . . . The new Albemarle building in Richmond, Va., below, provides comfortable, attractive offices and adequate room for expansion.





Ethyl services, which include training meetings for oil company personnel, below, and gasoline testing at conveniently located laboratories, left, are designed to assist customers.



Specially designed shopping bags are made by Interstate Bag Company at Walden, N. Y.



Products

Chemicals to Improve Petroleum Products

"Ethyl" Antiknock Compounds

TEL-Motor Mix
TEL-Aviation Mix
TEL-"Motor 33 Mix"
TML-Motor Mix
"MLA"-Motor Mix
"TELMEL"-Motor Mix

"Ethyl" Ignition Control Compounds ICC 1, ICC 3, ICC 4

"Ethyl" Multi-Purpose Additives MPA, MPA 9, MPA-D

"Ethyl" Antioxidants 701, 702, 703, 733

"Ethyl" Diesel Ignition Improver

"Ethyl" Combustion Improver 2

"Ethyl" Oil Soluble Dyes

"Ethyl" Antiwear Additive 38

"Ethyl" Antirust Additive 1

Chemicals for Industry

Diethyl Aluminum Chloride
Ethyl Aluminum Dichloride
Ethyl Aluminum Sesquichloride
Methyl Aluminum Sesquichloride
Triethyl Aluminum
Triethyl Aluminum-Diethyl
Aluminum Hydride Mixtures
Triisobutyl Aluminum
Tri-n-Propyl Aluminum
Trimethyl Aluminum
Triethyl-Trimethyl
Aluminum Mixtures
Sodium
Ethyl Chloride
Ethylene Dichloride
Vinyl Chloride
Vinylidene Chloride
Methyl Chloride
Hydropolymer Oil
Ortho-isopropylphenol
Ortho-tert-butylphenol
2,6-Di-tert-butylphenol

1-Methyl-6-tert-butylphenol

Trimethyl Phosphate
Caustic Soda (50% Sodium
Hydroxide Solution)
"Ethyl" Antioxidant 702
"Ethyl" Antioxidant 703
"Ethyl" Antioxidant 736

Chemicals Available in Development Quantities

Antioxidant 712
Antioxidant 720
2,6-Diisopropylphenol
Ortho-ethylaniline
2,6-Diethylaniline
Alpha-Sodio Sodium Acetate
Methyl Aluminum Sesquibromide
Triethyl Boron
Diethyl Zinc
Ferrocene

Pulp and Paper Mill Products

Unbleached Sulfate Pulp
Kraft Liner Board
Grocery Bag Kraft
Shipping Sack Kraft
Kraft Wrapping Paper
Asphalting Kraft
Pail Laminating Kraft
Variety Bag Kraft
Garment Bag Kraft
Shopping Bag Kraft
Coal Sack Kraft
Wet Strength Kraft
Extensible Kraft
Butchers Kraft
Waxing Kraft
Creping Kraft
Kraft Tire Wraps
Colored Kraft
Printed Kraft
File Folder Stock
Wallet Kraft
Gumming Kraft

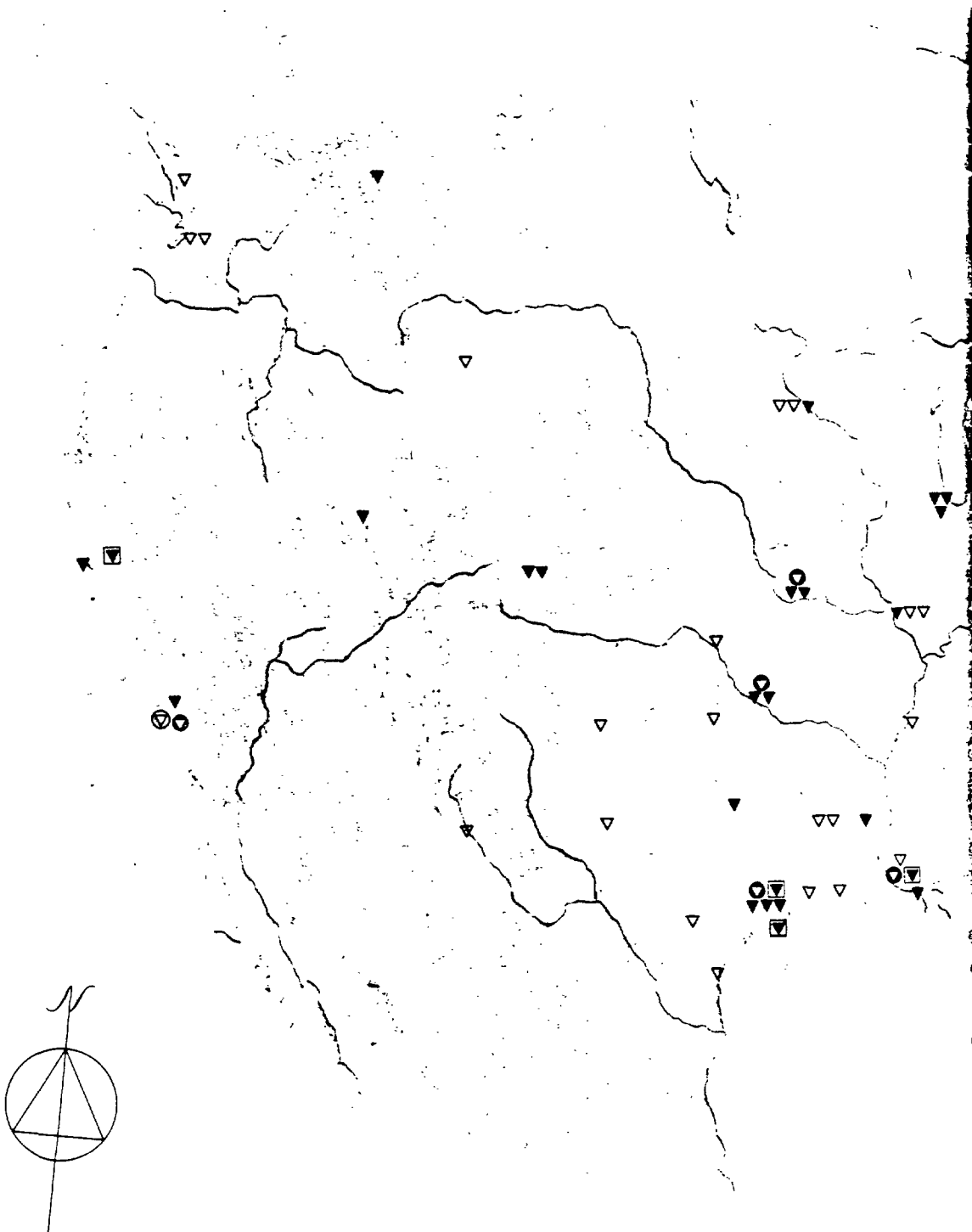
Braille Kraft
Masking Kraft
Flame Resistant Kraft
Beaming Kraft
Mill Wraps
Creped Kraft
Saturating Kraft
Interleaving Kraft
Coin Wraps
Coating Kraft
Potato Sack Kraft
Water Repellent Kraft
Textile Wraps
Fusee Kraft
Record Sleeve Kraft
Sandpaper Backing Kraft
Tile Backing Kraft
Blotting Paper
Filter Paper
Creped Tape
Cover Paper
Gasket Paper
Cushion Stock Paper

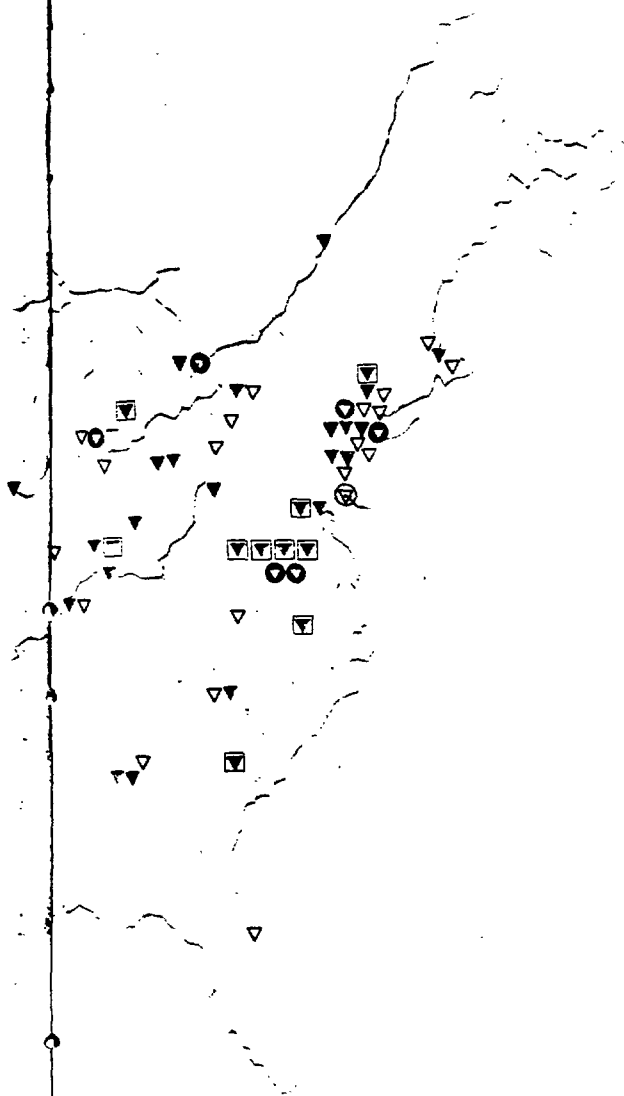
Processed Papers

Asphalt Laminated Kraft
Asphalt Saturated Kraft
Wax Laminated Kraft
Wax Coated Kraft
Wax Saturated Kraft
Fiberglass Reinforced Kraft
Slings for Fork Lift Trucks
Air Filter Papers
Oil Filter Papers
Core Stock
Resin Impregnated Papers
Silicone Coated Papers
Polyvinylidene Coated Kraft
Cast Coated Board

Converted Paper Products

Multiwall Shipping Sacks
Corrugated Shipping Containers
Handle Shopping Bags





Legend

- Executive Offices
- ◻ Chemical Manufacturing Plants
- ▼ Paper Division Manufacturing Plants
- Research Laboratories
- Gasoline Testing Laboratories
- Storage Terminals
- ▼ Regional Offices
- ▼ District Offices
- ▼ Paper Sales Offices
- ▽ Ethyl Representatives

Also Sales and Service Representatives and
Distributors covering foreign countries

Consolidated Balance Sheets

March 31, 1963 and 1962

Assets

Current Assets:

	1963	1962
Cash	\$ 10,448,315	\$ 2,156,086
Short-term securities	30,335,051	—
Accounts receivable	24,275,496	6,343,733
Inventories	32,229,961	5,546,890
Prepaid expenses	1,784,548	761,036

Total Current Assets	99,073,371	14,807,745
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Investments in affiliated companies	7,177,722	2,155,315
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Property, plant and equipment	174,871,590	47,635,368
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Less: Accumulated depreciation and depletion	23,912,460	18,413,396
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Net Property, Plant and Equipment	150,959,130	29,221,972
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Deferred charges and other assets	14,703,281	740,220
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Patents, contracts and other intangibles	12,995,641	—
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	<u>\$284,909,145</u>	<u>\$ 46,925,252</u>
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Liabilities**Current Liabilities:**

Accounts payable and accrued expenses . . .	\$ 16,375,126	\$ 3,444,387
Long-term debt — current portion	8,905,831	—
United States and Canadian income taxes . . .	10,791,603	1,050,247
Total Current Liabilities	36,072,560	4,494,634

Long-term debt	196,375,319	15,522,300
Provisions for deferred income taxes and employee benefits	9,939,474	2,105,997

Stockholders' Equity**Capital Stock:**

6% Cumulative Preferred, par \$100 per share . .	4,792,000	4,325,500
Glass A Common, par \$5 per share	745,180	745,180
Class B Common, par \$5 per share	5,191,630	4,403,190
Capital surplus	17,118,590	4,315,050
Retained earnings	14,778,157	11,235,615
	42,625,557	25,024,535

Less, Preferred stock in treasury — 1,018 shares in 1963 and 2,171 in 1962 (at cost)	103,765	222,214
Total Stockholders' Equity	42,521,792	24,802,321

	<u>\$284,909,145</u>	<u>\$ 46,925,252</u>
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Consolidated Statements of Income and Surplus

Fiscal Years Ended March 31, 1963 and 1962

Statements of Income

Income:

Net sales	\$ 99,814,250	\$ 48,578,227
Miscellaneous income, net	1,007,782	583,431
	<u>100,822,032</u>	<u>49,161,658</u>

Costs and expenses:

Cost of goods sold	72,902,380	40,078,363
Selling and general expenses	13,937,045	4,787,774
Interest and financing costs, long-term debt	5,146,876	814,204
United States and Canadian income taxes	4,455,000	1,719,051
	<u>96,441,301</u>	<u>47,399,392</u>
Net Income	<u>\$ 4,380,731</u>	<u>\$ 1,762,266</u>

Statements of Capital Surplus

Balance at beginning of year	\$ 4,315,050	\$ 3,251,176
Proceeds of warrants sold with 5 $\frac{3}{4}$ % notes due 1979 to 1982	11,126,066	—
Excess of conversion price over par value of debentures converted into common stock	1,681,608	47,460
Excess of cost over par value of preferred stock cancelled	(4,134)	(2,052)
Excess of fair value over par value of shares issued in common stock dividend	—	1,018,466
Balance at end of year	<u>\$ 17,118,590</u>	<u>\$ 4,315,050</u>

Statements of Retained Earnings

Balance at beginning of year	\$ 11,235,615	\$ 11,494,159
Add: Net income for the year	4,380,731	1,762,266
	<u>15,616,346</u>	<u>13,256,425</u>
Deduct:		
Cash Dividends		
Preferred Stock—\$6.00 per share	283,488	250,388
Common Stock—\$.50 per share	554,701	509,143
Common Stock dividend (5%) 48,563 shares	—	1,261,279
	<u>838,189</u>	<u>2,020,810</u>
Balance at end of year	<u>\$ 14,778,157</u>	<u>\$ 11,235,615</u>

The accompanying notes are an integral part of these statements.

Notes to Financial Statements

1. Acquisition of Ethyl Corporation

Ethyl Corporation (Virginia), formerly Albemarle Paper Manufacturing Company, purchased all of the outstanding stock of Ethyl Corporation (Delaware) on November 30, 1962. The allocation of the purchase price to the acquired corporation's assets has been based on an independent appraisal of such assets.

The accompanying financial statements at March 31, 1963 include the assets and liabilities of the acquired corporation and the results of its operations for the four months then ended. The statements for the previous fiscal year have been reclassified in certain respects to conform with the presentation for the year ended March 31, 1963.

2. Inventories

Inventories are stated at the lower of cost or market, with cost being determined on the last-in, first-out basis with respect to approximately \$21,100,000 of the inventory and generally on an average cost basis with respect to the remainder.

Inventories at March 31, 1963 include:

Finished goods	\$11,202,288
Raw materials and work in process	17,122,480
Stores, supplies, etc.	3,905,193
	<u>\$32,229,961</u>

3. Investments in Affiliated Companies

Investments in unconsolidated affiliates are stated at cost and represent the Company's investments in and advances to Ethyl-Dow Chemical Co., a 50%-owned company acquired on November 30, 1962, and Halifax Timber Company, a wholly-owned subsidiary organized to hold timber and timberlands. The Company's equity in the net assets of such affiliated companies at March 31, 1963 is approxi-

mately \$3,660,000. Dividends received exceeded the Company's equity in the net income of these companies by approximately \$77,000 in the year ended March 31, 1963; no dividends were received from Halifax Timber Company in the preceding year, earnings of that company having been insignificant.

4. Property, Plant & Equipment

Property, plant and equipment is stated at cost as follows:

Land	\$ 10,775,436
Timberlands and standing timber	4,097,231
Buildings	25,429,731
Machinery and equipment	134,569,192
	<u>\$174,871,590</u>

5. Deferred Charges & Other Assets

Deferred charges at March 31, 1963 include unamortized discount on long term debt of \$10,931,281 (see Note 10) and other deferred financing expenses of \$2,209,551.

6. Patents, Contracts & Other Intangibles

Patents and contracts with an unamortized cost basis of \$7,585,277 are being amortized over their respective lives. Other intangibles are stated at cost of \$5,410,364.

7. Long-Term Debt

Long-term debt as of March 31, 1963 includes:

	Maturing on or before March 31, 1964	Maturing after March 31, 1964	Totals
5½% Notes payable to bank, due 1963 and 1964	\$8,000,000	\$ 8,000,000	\$ 16,000,000
5¾% Senior notes, due 1965 to 1978	—	114,000,000	114,000,000
5¾% Subordinated notes, due 1967	218,777	19,562,449	19,781,226
5¾% Subordinated notes, due 1979 to 1982	—	50,000,000	50,000,000
3¾% Guaranteed notes, due 1963 to 1970	687,054	4,812,870	5,499,924
	<u>\$8,905,831</u>	<u>\$196,375,319</u>	<u>\$205,281,150</u>

Under the terms of the loan agreements relating to the Subordinated notes due 1967, the Company is required to make prepayments in amounts equal to cash dividends and preferred stock sinking fund contributions and additional amounts, contingent on earnings, which may bring aggregate prepayments up to \$4,000,000 per annum.

8. Provision for Deferred Income Taxes

Depreciation deductions for income tax purposes are based on accelerated methods and exceed book provisions. In addition, certain expenditures which are properly chargeable against income in subsequent periods are deductible for income tax purposes when incurred. Resultant tax savings are deferred to subsequent periods when amounts chargeable against book income will exceed amounts deductible for tax purposes.

9. Capital Stock

The Class A Common Stock is the Company's voting stock. As of March 31, 1963, there were 156,000 shares authorized, of which 149,036 shares are outstanding. A voting trust agreement between the Company and the holders of 68.3% of this stock, which expires in 1970, or sooner under certain conditions, provides that the stock will be voted by trustees who presently are F. D. Gottwald, F. D. Gottwald, Jr., and B. C. Gottwald.

The Class B Common Stock has no voting privileges except as required by law. As of March 31, 1963, there are 2,000,000 shares authorized, of which 1,038,328 shares are outstanding.

The 6% Cumulative Preferred Stock was issued in four series, originally aggregating 58,618 shares. As of March 31, 1963, there are 100,000 shares authorized, of which 47,920 shares are outstanding and 1,018 shares are held in the Company's treasury.

The Cumulative Preferred Stock is entitled to annual sinking fund contribu-

tions, the maximum of which is 5% (\$293,090 at March 31, 1963) of the par value of the original issue of such stock. The Company intends to use Preferred Stock in treasury at March 31, 1963 to satisfy, in part, the sinking fund requirement due June 30, 1963.

10. Warrants

Together with the issue of the \$50,000,000 Subordinated Notes due 1979 to 1982, the Company sold warrants which entitle the holders thereof to purchase 400,000 shares of unissued Class B Common Stock, \$5 par value, at \$27.50 per share. \$11,126,066 from the sale of warrants has been added to capital surplus; a corresponding amount has been recorded as amortizable discount on long term debt.

The warrants are exercisable on or before November 1, 1982. As of March 31, 1963, none of the warrants had been exercised.

11. Restricted Payments

Under the terms of the Company's note agreements, the amount of cash dividends which may be paid on the Common Stock, \$5 par value, is limited to \$1.00 per share per annum, so long as any of the Subordinated Notes due 1967 remain outstanding. In addition, an amount equal to the aggregate of all cash dividends and sinking fund payments for the retirement of preferred stock must be prepaid on the Subordinated Notes of 1967.

The agreements contain provisions which, in addition to other restrictions, limit the aggregate amount of prepayments on any subordinated notes, cash dividends and expenditures for acquisition of the Company's stock to 60% of consolidated net earnings, as defined, accumulated after April 1, 1962 and prior to April 1, 1968 plus 50% of such consolidated net earnings accumulated after March 31, 1968. At March 31, 1963, \$2,150,000 of retained earnings is available for such payments.

12. Stock Option Plan

On November 12, 1962, the stockholders approved a restricted stock option plan under which 150,000 shares of unissued Class B Common stock were reserved for issuance to officers and other key employees. Up to March 31, 1963, options were granted to purchase 134,500 shares. On April 18, 1963, options to purchase an additional 6,800 shares were granted. These options are exercisable over periods up to 10 years at prices ranging from \$56.50 to \$77.00 per share.

13. Non-Cash Expenses

Depreciation and depletion charged to income amounted to \$5,766,779 and \$2,294,903 in the years ended March 31, 1963 and 1962 respectively; other non-cash expenses (principally amortization of intangibles and of deferred discount and

financing expenses) amounted to \$789,113 in 1963.

14. Post Balance Sheet Events

On April 18, 1963, the Board of Directors voted to submit for the approval of holders of Class A and Class B Common Stock, at the annual meeting to be held May 23, 1963, amendments to the Company's Articles of Incorporation which would:

(a) Increase the number of authorized shares of Class B Common Stock to 4,000,000; (b) Reduce the par value of each share of Class A and Class B Common Stock from \$5 to \$3 per share; (c) Concurrent with the reduction in par value, issue one additional share of Class B Common Stock, \$3 par value, for each share of Class A and Class B Common Stock then outstanding; (d) Authorize new Cumulative Second Preferred Stock of 250,000 shares, par value \$100 per share.

Auditors' Report

To the Board of Directors, ETHYL CORPORATION:

We have examined the balance sheet of Ethyl Corporation (formerly Albemarle Paper Manufacturing Company) and its consolidated subsidiaries, as of March 31, 1963, and the related statements of income, of retained earnings and of capital surplus for the fiscal year then ended. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying statements present fairly the financial position of Ethyl Corporation and its consolidated subsidiaries at March 31, 1963 and the results of their operations for the fiscal year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Lybrand, Ross Bros. & Montgomery

LYBRAND, ROSS BROS. & MONTGOMERY

New York, April 22, 1963

Ten Years of Continuous Growth

<i>Fiscal Year Ended March 31</i>		1963 ⁽¹⁾	1962	1961
Sales and Income				
Net sales ⁽²⁾		\$99,814,250	\$48,578,227	\$50,320,518
Income before non-cash items and income taxes		15,391,623	5,776,220	7,252,998
Depreciation, depletion and amortization		6,555,892	2,294,903	2,077,980
Income taxes		4,455,000	1,719,051	2,740,399
Net income		4,380,731	1,762,266	2,434,619
Cash flow		12,117,007	4,211,875	4,680,496
Financial Condition				
Working capital		63,000,811	10,313,111	8,586,720
Ratio of current assets to current liabilities		\$2.75 to \$1.00	\$3.29 to \$1.00	\$2.73 to \$1.00
Land, buildings, machinery, and equipment (Net)		150,959,130	29,221,972	28,336,492
Expenditures for property, plant and equipment		4,838,805	4,820,189	2,644,359
Long term debt		196,375,319	15,522,300	13,092,000
Common Stock				
Number of shares outstanding		1,187,362	1,029,674	976,956
Earnings per share ⁽³⁾		3.79	1.47	2.12
Income taxes per share ⁽³⁾		4.12	1.67	2.68
Dividends per share		.50	.50	.50
Book value per share		31.86 ⁽⁴⁾	20.10	19.14

(1) 1963 figures include four months of combined operations; previous years include Albemarle operations only.

Ethyl Corporation and Subsidiaries

	1960	1959	1958	1957	1956	1955	1954
8	\$44,572,285	\$35,881,981	\$34,527,980	\$34,737,760	\$29,082,043	\$22,143,450	\$21,143,286
8	6,138,973	6,007,198	5,781,548	6,346,016	4,828,940	2,304,483	2,170,706
0	2,041,843	1,607,425	1,482,130	1,200,675	1,248,266	917,060	865,577
9	1,958,081	2,266,473	2,378,411	2,839,501	1,972,419	718,204	688,470
9	2,139,049	2,133,300	1,921,007	2,305,840	1,608,255	669,219	616,659
6	4,344,420	3,785,924	3,795,461	3,799,630	3,149,360	1,843,984	1,769,708
0	7,950,568	9,143,917	7,640,165	6,790,823	3,458,134	3,447,958	3,014,233
0	\$3.22 to \$1.00	\$3.91 to \$1.00	\$3.92 to \$1.00	\$2.73 to \$1.00	\$1.64 to \$1.00	\$2.81 to \$1.00	\$2.79 to \$1.00
2	27,742,696	24,512,702	20,015,076	18,231,910	13,821,610	11,854,463	11,522,804
9	5,291,737	6,099,122	2,957,526	5,557,245	3,009,303	1,451,386	1,617,579
0	13,178,500	13,793,100	8,700,000	9,109,043	5,248,392	4,824,262	4,695,183
3	971,803	760,992	699,761	621,020	542,880	271,440	271,440
2	1.85	1.92	1.73	2.39	1.79	.65	.58
8	1.94	2.33	2.47	3.16	2.39	.87	.83
0	.50	.50	.50	.37 ¹ / ₂	—	—	—
4	17.50	16.28	14.58	13.26	10.72	8.94	8.25

(2) Net sales are stated before deducting freight cost.

(3) Based on the average number of shares outstanding in each year, adjusted for stock splits and stock dividends.

(4) Includes addition to capital surplus of \$9.37 per share resulting from sale of warrants. See Note 10 in Notes to Financial Statements.

Ethyl Corporation

Officers Floyd D. Gottwald, Chairman of the Board
B. B. Turner, President
Floyd D. Gottwald, Jr., Executive Vice President
George F. Kirby, Executive Vice President
William R. Perdue, Jr., Executive Vice President and Treasurer
Joseph A. Costello, Vice President
Bruce C. Gottwald, Vice President and Secretary
Joseph M. Lowry, Vice President
Malcolm P. Murdock, Vice President
Frederick P. Warne, General Counsel

Albemarle Paper Manufacturing Company

(Wholly owned subsidiary)

Headquarters: Richmond, Va.

Officers Floyd D. Gottwald, Chairman of the Board
Floyd D. Gottwald, Jr., President
K. F. Adams, Executive Vice President
S. Douglas Fleet, Executive Vice President
Joseph M. Lowry, Executive Vice President and Treasurer
H. W. Ellerson, Jr., Vice President
Charles H. Robertson, Vice President
Bruce C. Gottwald, Vice President and Secretary
C. R. Hailey, Controller and Assistant Secretary

Paper Converting Divisions

RAYMOND BAG DIVISION, Middletown, Ohio
J. T. Walton, General Manager
RICHMOND CONTAINER DIVISION, Richmond, Va.
A. J. Bagley, Manager

Ethyl Corporation of Canada Limited

(Wholly owned subsidiary)

Headquarters: Toronto, Ontario, Canada

Officers B. B. Turner, Chairman of the Board
Alan C. Tully, President
Howard J. Philp, Vice President
William R. Perdue, Jr., Treasurer
Herbert A. Savage, Secretary

Ethyl-Dow Chemical Company

(Fifty percent owned affiliate)

Headquarters: Freeport, Texas

Officers G. F. Dressel, President
Douglas E. Lake, Vice President and General Manager
William R. Perdue, Jr., Vice President and Treasurer
Arthur P. Deverill, Secretary and Assistant Treasurer

ETC 16839

Ethyl Corporation and Subsidiaries

Directors Floyd D. Gottwald, Chairman*
B. B. Turner*
Joseph A. Costello
S. Douglas Fleet, Executive Vice President,
Albemarle Paper Manufacturing Company
Bruce C. Gottwald*
Floyd D. Gottwald, Jr.*
Frank A. Howard, Research Consultant and
Director of former Ethyl Corporation
George F. Kirby*
Joseph M. Lowry

Robert T. Marsh, Jr., President,
First and Merchants National Bank, Richmond, Va.

Malcolm P. Murdock

Lewis F. Powell, Jr., Partner,
Hunton, Williams, Gay, Powell & Gibson, Richmond, Va.

William R. Perdue, Jr.*

S. Buford Scott, Partner,
Scott and Stringfellow, Richmond, Va.

Edward L. Shea, Former President, Chairman and
Director of former Ethyl Corporation

* Members of the Executive Committee

Directors Floyd D. Gottwald, Chairman
B. B. Turner
K. F. Adams
H. W. Ellerson, Jr.
S. Douglas Fleet
Bruce C. Gottwald
Floyd D. Gottwald, Jr.

C. R. Hailey

T. G. Harris
Manager, Timber Operations

Joseph M. Lowry

Lewis F. Powell

Charles H. Robertson

K. D. Running, Assistant Manager,
Roanoke Rapids Division, Roanoke Rapids, N. C.

ALBEMARLE CONTAINER DIVISION, Odenton, Md.

J. B. Marsch, Manager

INTERSTATE BAG COMPANY DIVISION, Walden, N. Y.

H. K. Steen, President

Directors B. B. Turner, Chairman
Joseph A. Costello
George F. Kirby
Malcolm P. Murdock

William R. Perdue, Jr.

Howard J. Philp

Edward L. Shea

Alan C. Tully

Directors Donald K. Ballman, Vice President and Director,
Dow Chemical Company
Calvin A. Campbell, Vice President, Secretary and
Director, Dow Chemical Company
Joseph A. Costello
G. F. Dressel

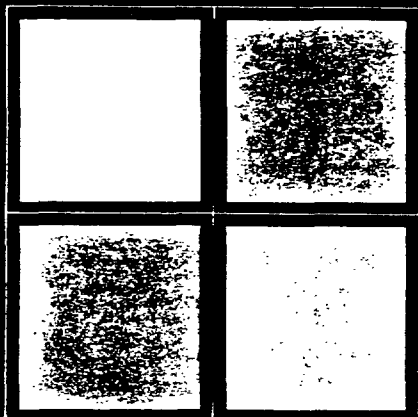
Glenn O. Hayes, General Manager of Manufacturing,
Ethyl Corporation

George F. Kirby

Douglas E. Lake

William R. Perdue, Jr.

ETHYL CORPORATION ANNUAL REPORT



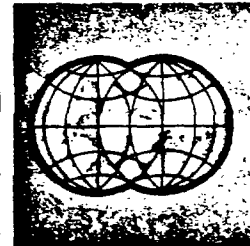
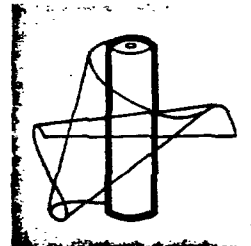
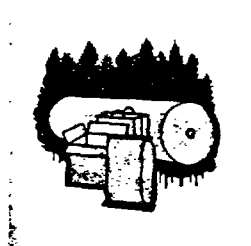
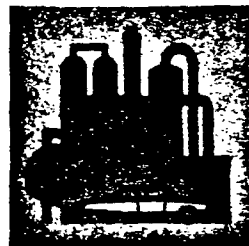
FOR THE YEAR ENDED MARCH 31, 1963

ETC 16841

Ethyl

C O R P O R A T I O N

1963 ANNUAL REPORT

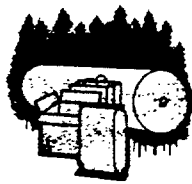




Petroleum Chemicals

Ethyl's petroleum chemicals are used by oil companies to improve the quality and performance and to preserve the desirable qualities of petroleum products.

- "Ethyl" Antiknock Compounds
 - TEL-Motor Mix
 - TEL-Aviation Mix
 - TEL-"Motor 33 Mix"
 - TML-Motor Mix
 - "MLA"-Motor Mix
 - "TELMEL"-Motor Mix
- "Ethyl" Ignition Control Compounds
 - ICC 1, ICC 3, ICC 4
- "Ethyl" Multi-Purpose Additives
 - MPA, MPA 9, MPA-D
- "Ethyl" Antioxidants
 - 701, 702, 703, 728, 733
- "Ethyl" Diesel Ignition Improver
- "Ethyl" Combustion Improver 2
- "Ethyl" Oil Soluble Dyes
- "Ethyl" Antiwear Additive 29



Paper

Albemarle's diversified lines of kraft paper, paper board and specialty and converted paper products find use in many industrial, commercial and packaging applications.

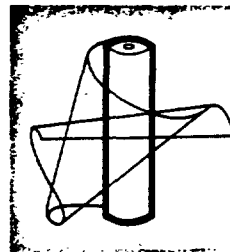
- Unbleached Sulfate Pulp
- Kraft Liner Board
- Grocery Bag Kraft
- Shipping Sack Kraft
- Kraft Wrapping Paper
- Asphalting Kraft
- Variety Bag Kraft
- Garment Bag Kraft
- Shopping Bag Kraft
- Extensible Kraft
- Waxing Kraft
- Creping Kraft
- Kraft Tire Wraps
- Colored Kraft
- Printed Kraft
- File Folder Stock
- Masking Kraft
- Flame Resistant Kraft
- Beaming Kraft
- Mill Wraps
- Creped Kraft
- Saturating Kraft
- Coin Wraps
- Coating Kraft
- Potato Sack Kraft
- Water Repellent Kraft
- Textile Wraps
- Blotting Paper
- Filter Paper
- Creped Tape
- Gasket Paper
- Processed Papers**
 - Asphalt Laminated Kraft
 - Asphalt Saturated Kraft
 - Wax Laminated Kraft
 - Wax Coated Kraft
 - Wax Saturated Kraft
 - Fiberglass Reinforced Kraft
 - Air Filter Papers
 - Oil Filter Papers
 - Core Stock
 - Resin Impregnated Papers
 - Silicone Coated Papers
 - Cast Coated Board
 - Clay Coated Kraft Board
- Converted Products**
 - Multiwall Shipping Sacks
 - Corrugated Shipping Containers
 - Handle Shopping Bags



Industrial Chemicals

Ethyl's industrial chemicals are essential components in the manufacture of a wide range of plastic, agricultural, industrial, household, national defense and other products.

- Diethyl Aluminum Chloride
- Ethyl Aluminum Dichloride
- Ethyl Aluminum Sesquichloride
- Methyl Aluminum Sesquichloride
- Triethyl Aluminum
- Triethyl Aluminum-Diethyl Aluminum Hydride Mixtures
- Triisobutyl Aluminum
- Tri-n Propyl Aluminum
- Trimethyl Aluminum
- Triethyl Boron
- Diethyl Zinc
- Sodium
- Sodium Lead Alloy
- Ethyl Chloride
- Ethylene Dichloride
- Vinyl Chloride
- Vinylidene Chloride
- Methyl Chloride
- Hydropolymer Oil
- 1,1,1-Trichloroethane
- Perchloroethylene
- Trichloroethylene
- Ortho-isopropylphenol
- Ortho-tert-butylphenol
- 2,6-Di-tert-butylphenol
- 2,6-Di-tert-butylhydroquinone
- 4,6-Dinitro-2-sec-butylphenol
- Ortho-sec-butylphenol
- Trimethyl Phosphate
- Caustic Soda (50%)
- "Ethyl" Antioxidants
 - 702, 703, 736
- XIII-Diisocyanate
- Chemicals Available in Development Quantities**
 - Antioxidant 712
 - Ortho-ethylaniline
 - 2,6-Diethylaniline
 - Ferrocene
 - 2,6-Di-sec-butylphenol
 - 2,6-Di-tert-butyl-p-benzoquinone
 - Mixed Styrenated Phenols



Plastics

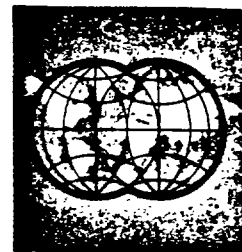
"VisQueen" polyethylene film, an unusually versatile material, is widely used in modern packaging, building construction, agriculture, industry, around the home, and in a variety of other applications.

Packaging Films

- Q—general purpose
- Hi-Impact—general purpose, with increased impact resistance
- L—tough, for liners for drums containing liquids
- O—general purpose, medium density, for overwrapping
- "TnT"—strong, high clarity
- Shrink Film—high clarity, with excellent shrink properties
- Clear Industrial Grade and Industrial Grade—utility types
- Natural—low-density, general purpose
- "Visotherm A"—rubber-modified high density

Building and Agricultural Films

- Standard Custom Rolls
 - 3' to 40' Widths
- Agricultural Specialties
 - Mulch Film
 - Green House
 - Silo Caps
- Swimming Pool Covers
- Drop Cloths
- "VisQueen" Super Tough
- "VisQueen" Mobil Home Film
- "VisQueen" Concrete-curing Highway Film
- "VisQueen" Blankets
- "VisQueen" Pressure Tape
- "Visklamps"



Ethyl International

Ethyl International, a new division created during the year, handles the sale, distribution and servicing of the Company's petroleum and industrial chemicals, paper and plastic products in all countries outside of the United States and Canada.



1963 ANNUAL REPORT

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Annual Meeting

The annual meeting of Ethyl Corporation shareholders will be held at the Company's executive offices in Richmond, Va., on Thursday, May 28, 1964. A formal notice of the meeting, together with a proxy statement and proxy form, will be sent to shareholders in advance of the meeting.

Stock Transfer Agents

First and Merchants National Bank, Richmond, Va.

General Counsel

Hunton, Williams, Gay, Powell & Gibson, Richmond, Va.

Executive Offices

330 South Fourth Street, Richmond, Va.

100 Park Avenue, New York, N. Y.

The Year in Brief

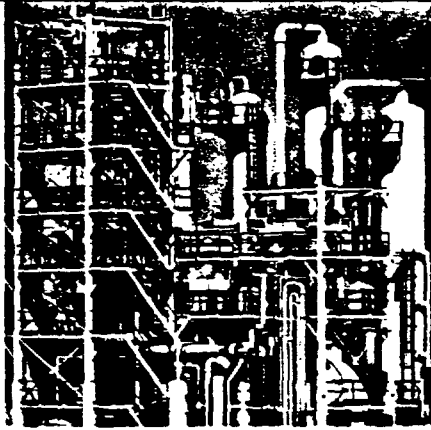
- ▣ First full year of combined chemical and paper operations completed successfully.
- ▣ Sales of \$226,554,354 and earnings of \$13,558,080 exceed original forecasts.
- ▣ Petroleum Chemicals, Industrial Chemicals, Ethyl International and Plastics divisions organized.
- ▣ "VisQueen" polyethylene film operations acquired.
- ▣ Rearrangement of long-term debt provides additional capital for further expansion.
- ▣ Records established in volume of kraft paper produced.
- ▣ Cost reduction and efficiency improvement programs successfully pursued.
- ▣ Ethyl of Canada building new chemicals manufacturing facilities.
- ▣ Synthetic primary alcohol plant under construction.

FINANCIAL HIGHLIGHTS	Twelve-Month Periods Ended	
	December 31 1963	March 31 1963 ⁽¹⁾
Net Sales	\$226,554,354	\$ 99,814,250
Taxes on Income	13,560,000	4,455,000
Net Income	13,558,080	4,380,731
Cash Flow	30,388,016	12,117,007
Net Income per Share of Common Stock ⁽²⁾ . .	\$5.59	\$1.90 ⁽³⁾
Cash Dividends		
Preferred Stock	276,540	283,488
Common Stock	789,697	554,701
Earnings Retained in Business	12,491,843	3,542,542
Depreciation, Depletion and Amortization . .	15,131,178	6,555,892
Capital Expenditures	18,862,000	4,838,805
Total Assets	285,480,077	284,909,145
Working Capital	67,337,401	63,000,811
Book Value per Share of Common Stock . . .	\$20.06	\$15.93 ⁽³⁾

(1) Includes only four months of combined paper and chemical operations.

(2) Based on average number of shares outstanding in each period.

(3) Adjusted for two-for-one stock split of May 31, 1963.



*To the Shareholders, Employees
and Friends of Ethyl Corporation:*

We are happy to report that the first full year of Ethyl Corporation (Virginia), formed November 30, 1962 by the merger of Ethyl Corporation (Delaware) and the former Albemarle Paper Manufacturing Company, was very successful. It was a year when the two organizations were effectively associated, when progress was made in diversification and expansion, when steps were taken toward a divisional organization, and when sales and earnings exceeded original forecasts.

Since the Company's annual accounting period has been changed to a calendar-year basis, this report covers the year ended December 31, 1963.

In 1963, net sales for the Company and its subsidiaries totaled \$226,554,354. Net income for the year amounted to \$13,558,080 or \$5.59 per share of common stock.

In the fiscal year ended March 31, 1963, we reported net sales of \$99,814,250 and net income of \$4,380,731, or \$1.90 per share of common stock. The substantial increases in the most recent period result primarily from the fact that the year ended December 31 included a full 12 months of combined paper and chemical operations, whereas the fiscal year ended March 31 included eight months of paper operations and only four months of combined paper-chemical operations.

In the Company's chemical business substantial growth was experienced in a number of our newer products, while certain other products, especially vinyl chloride monomer, felt some adverse effects of intensified competition and price adjustments. Overall results in the chemical business were good.

Ethyl continues to maintain a strong position in the antiknock compound market and expects to benefit from the growth in this area.

In the paper business, product prices, which had declined sharply during the previous fiscal year, remained generally depressed for much

of 1963. They did improve significantly in the last few months, however, and further price increases are anticipated.

The introduction of new paper and paper-plastic products, the installation of modern, efficient, high-output equipment and facilities, together with improved prices, are expected to enhance the profitability of our paper operations in 1964.

Acquisition of the major portion of the polyethylene film operations of Union Carbide Corporation's Visking division was a significant step in Ethyl's diversification and expansion. It strengthens our position in the packaging field, where the film is widely used, and fits very well into our situation as a producer of paper and packaging materials and a manufacturer of chemical intermediates for other plastics.

While the polyethylene film business is quite competitive, we are confident that there is a good future in it for Ethyl and that it will make a material contribution to our earnings.

The finances of the acquisition are discussed in the Financial Review section of this report, and the history, manufacture, sale and uses of the film are explained in a special insert entitled "The VisQueen Story."

The Company has repaid \$12.5 million of debt, leaving a present debt, both current and long-term, of a little over \$194 million. Payments in the next five years range from \$2 million in 1964 to \$12 million in 1968, or an average of about \$9.5 million a year. Summaries of our long-term debt and of debt maturities appear in the Financial Review section of this report.

Cash flow—currently in the neighborhood of \$30 million a year—is providing ample funds for orderly debt retirement and for dividend payments at present rates, and is now furnishing approximately \$20 million a year for capital expenditures. Over the next five years, depending on the rate at which new investments generate increased depreciation, and depending, of course, upon earnings, we estimate that between \$100 million and \$150 million will be available for capital expenditure, without recourse to further financing.

Looking ahead, the Company's operations are being planned on a divisional basis, with a central staff management group coordinating the activities of the various units. In carrying out such a plan, a Petroleum Chemicals division, an Industrial Chemicals division, an Ethyl International division and a Plastics division have been organized. The activities of these divisions are described in the Operations Review section of this report.

Successful research and engineering and effective pilot plant operations have culminated in a process to manufacture straight-chain alcohols, used in detergents and plastics. The Company is constructing a plant to produce these alcohols commercially at the Ethyl manufacturing center at Houston.

In other expansion moves, the Company is entering the field of chlorinated solvents, and Ethyl Corporation of Canada has started construction of facilities to produce several industrial and petroleum chemicals for the Canadian market.

Our research program continues to be aggressively conducted in a number of areas, investigating new applications and new products.

We were saddened by the death, early in December, of Edward L. Shea, former president and chairman of Ethyl Corporation (Delaware) and a valued member of the board of directors of Ethyl Corporation (Virginia). Mr. Shea was a widely known and highly respected business executive whose constructive counsel was extremely helpful.

We are glad to welcome to the board of directors E. Claiborne Robins, president of A. H. Robins Company, drug and pharmaceutical manufacturers of Richmond, Va., and Erwin H. Will, chairman of the board of Virginia Electric and Power Company, also of Richmond.

In the year ahead, we plan to continue the consolidation of the organization along divisional lines and to make further progress in expansion and diversification. On the basis of a full year's operations of the new "VisQueen" polyethylene film business, projections of continued price improvements in paper during 1964, and another successful year in chemicals, we look for improved sales and earnings.

Meanwhile, we want to express to shareholders, employees, suppliers and customers our appreciation for their continued outstanding support.

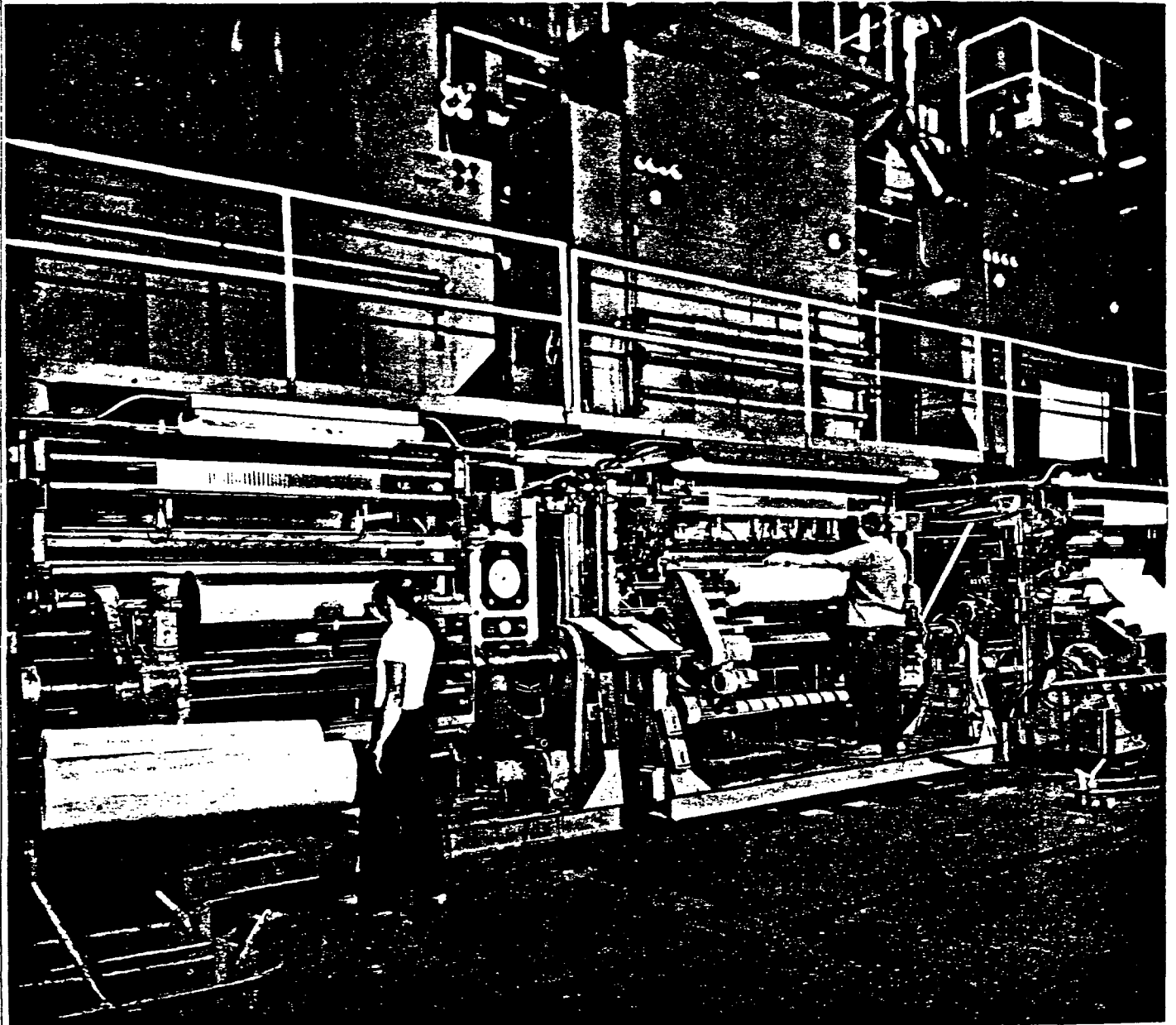


B. B. TURNER
President



F. D. GOTTWALD
Chairman of the Board

Financial Review



Versatile "VisQueen" polyethylene film is made at Flemington, N. J.; Terre Haute, Ind.; and Fremont, Calif.

Annual Accounting Period

Beginning with 1963, the Company's annual accounting period is changed to a calendar-year basis. In keeping with this change, and in order to present the results of a full year's operations, this report covers the 1963 calendar year, rather than just the nine-month period which has elapsed since March 31, 1963, the date of the last annual report. However, to provide a continuous financial record, nine-month figures are shown in the Consolidated Statements of Income and Surplus on page 22.

Throughout the report, where the calendar year 1963 is compared with the fiscal year ended March 31, 1963, it should be remembered there is an overlapping period of three months, since January, February and March 1963 are included in both years.

Sales and Marketing

Net sales of Ethyl Corporation and its subsidiaries, for the year ended December 31, 1963, totaled \$226,554,354. The increase of \$126,740,104 over sales of \$99,814,250 in the fiscal year ended March 31, 1963 results primarily from the fact that the year 1963 includes 12 months of combined paper and chemical operations, and one month of polyethylene film operations. The fiscal year ended March 31, 1963, included eight months of just paper operations and only four months of combined paper and chemical operations.

The year 1963 was a generally good one for chemicals. All of the production of the new caustic soda plant was sold in its first year and it is anticipated that the same sales position will be enjoyed in 1964. Sales of aluminum alkyls and of various petroleum chemicals increased during the year. Intensified competition and price adjustments had some adverse effect on some of the Company's other products, but their



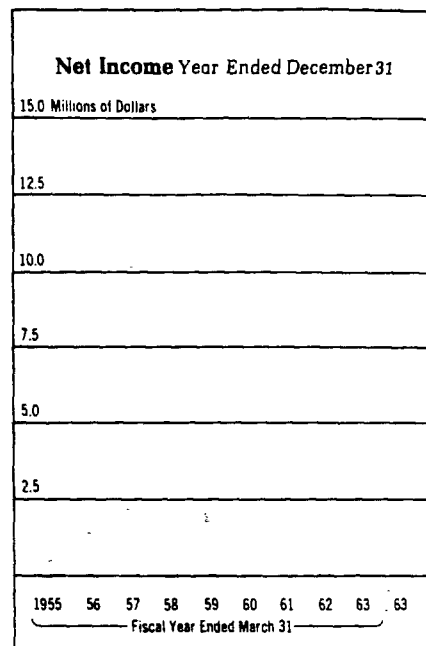
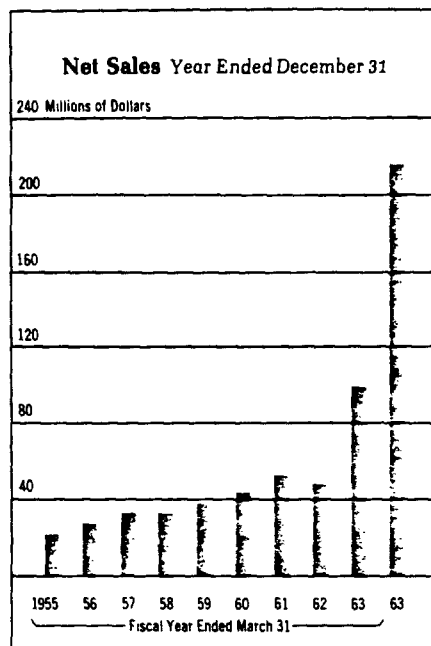
Ethyl research includes studies of new plastics and new uses for plastics.

volume generally remained at satisfactory levels.

During 1963, there was a substantial increase in the cost of metallic lead, the most important raw material used in the manufacture of antiknock compounds. Early in 1964 an increase was effected in the price of antiknock compounds, which offset a substantial portion of this increased cost.

Ethyl Corporation of Canada Limited, a wholly-owned subsidiary, increased the dollar volume of its sales and profits, primarily from greater sales of antiknock compounds. Ethyl of Canada has started construction of new facilities for the production of other petroleum and industrial chemicals at its Sarnia plant.

In the kraft paper industry, product prices, which had declined sharply in 1962, remained at low levels during much of the year. There were some increases in the last several months of the year, but Albemarle still must sell most grades of kraft paper and converted paper products at prices below the highs of a few years ago.



In absorbent and saturated papers prices remained firm, and some slight price increases are expected in these grades in the year ahead. During 1963, present grades have been improved and new outlets for saturated paper products have been developed.

The record production of kraft paper and paper board accounts for most of the profits in paper operations. Continued demand, along with the modest price increases that are expected to materialize, should increase profitability during 1964.

Overseas, Ethyl's products were sold in over 80 countries. The sale of antiknock compounds increased substantially and there also were significant gains in the sale of other petroleum chemicals. Mixed lead alkyl antiknocks were successfully introduced to refiners in the Far East and their use is becoming increasingly popular.

The volume of foreign business is expected to increase in the next year as Ethyl International, the new Com-

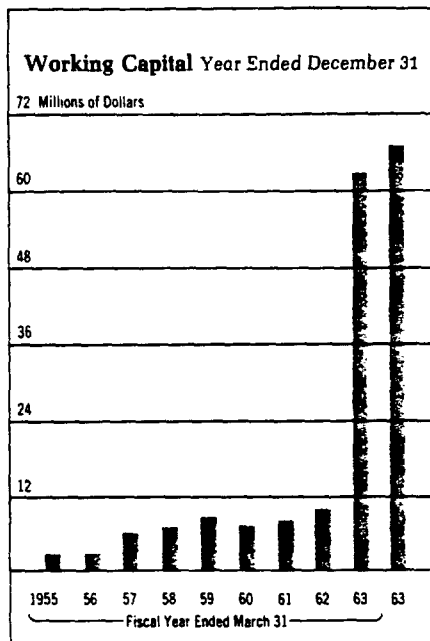
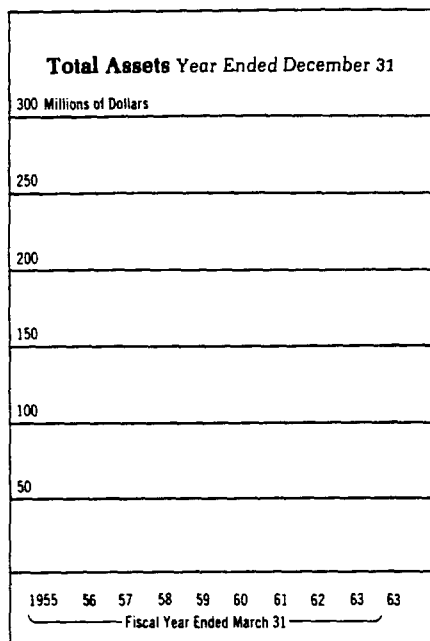
pany division created to handle the sale, distribution and servicing of products abroad, becomes fully operational.

Earnings

Earnings increased from \$4,380,731 in the fiscal year ended March 31, 1963 to \$13,558,080 in the 1963 calendar year. This increase also is due primarily to including twelve months of combined paper and chemical operations in the calendar year vs. eight months of paper and four months of combined paper and chemical operations in the fiscal year. On a per-share basis, earnings amounted to \$5.59 in the calendar year, against \$1.90 in the fiscal year.

Interest costs were at a peak level in 1963, amounting to \$11,511,195. They will be \$450,000 lower in 1964, and \$2,500,000 lower by 1968.

In addition, the year's earnings reflect charges of approximately \$900,000, on an after-tax basis, for special retirements, non-recurring costs inci-



dental to the VisQueen acquisition, and the writeoff of certain assets and deferred expenses.

Capital Stock and Dividends

In May 1963, the shareholders approved an increase in the amount of authorized Class B Common Stock from 2,000,000 to 4,000,000 shares, and a reduction in the par value of both Class A and Class B Stock from \$5 to \$3 per share. Concurrently, a two-for-one split was effected, whereby stockholders received one share of Class B Stock for each share of Class A or B held by them. With the issue of these shares, plus the issue of 1,083 Class B shares under employees' stock options, there were outstanding, at December 31, 1963, 2,375,807 shares of Class A and B stock.

Cash dividends paid or declared totaled \$1,066,237 for the year. This total is comprised of dividends on the Class A and Class B Common stock,

now at an annual rate of 36¢ per share, and dividends of \$6 per share on the Cumulative Preferred.

During the year, contributions of \$293,090 were made into the Sinking Fund required for the retirement of Preferred Stock. The Treasury Stock (127 shares), as shown in the December 31, 1963 balance sheet, will be used to satisfy, in part, the 1964 Sinking Fund requirements.

In May 1963, the shareholders also authorized a Cumulative Second Preferred Stock in the amount of \$25,000,000. This stock is represented by 250,000 shares with par value \$100 per share, none of which has as yet been issued.

Long-Term Debt

The long-term debt has been repaid in the amount of \$12,576,120. Payments include \$8,000,000 on the 5½% \$16,000,000 Bank Loan; \$2,015,000 on the 5¾% \$20,000,000 Subordinated Notes



of 1967; and \$2,561,120 on the 3³/₈% Guaranteed Notes of 1970.

On December 30, 1963, the Company refinanced at the same interest rate the \$8,000,000 balance of the Bank Loan and the \$17,985,000 balance of the Subordinated Notes of 1967. This action increases by approximately \$14,000,000 the amount of cash which the Company will have available over the next five years for diversification and expansion.

Under the debt rearrangement, dividend restrictions of 50¢ per share on the Common Stock and limitations on payments on the Preferred Stock have been removed. However, the Senior Note Agreement limits the payment of cash dividends, prepayment of Subordinated Notes, and redemption of outstanding shares of stock to 60% of net earnings after April 1, 1962. At December 31, 1963, \$5,900,000 of retained earnings was available for such payments.

The total borrowings at December 31, 1963, and the debt maturities are shown in the accompanying boxes

titled "Summary of Long-Term Debt" and "15-Year Summary of Debt Maturities."

Capital Expenditures

On November 30, 1963, the Company completed the acquisition of "Vis-Queen" polyethylene film operations from Union Carbide Corporation. In the acquisition, the Company paid \$17 million for three plants and associated equipment, plus patents, contracts, accounts receivable and inventories connected with the business.

Inventories and accounts receivable were acquired for \$4,800,000, and \$12,200,000 was paid for the other properties, including property, plant and equipment at three well-located manufacturing plants — Flemington, N. J.; Terre Haute, Ind.; and Fremont, Calif.

The remaining capital expenditures of \$6,662,000 were for improvement and expansion of the Company's present business.



Efficiencies in the handling of major raw materials include truck delivery of pulpwood to the pulp and paper mill at Roanoke Rapids, N. C., and barge shipments of pig lead to the chemicals manufacturing plant at Houston, Texas.

Source and Disposition of Funds and Working Capital

The following tabulation shows the source and disposition of funds for the year:

Source of Funds:	
Net Earnings	\$13,558,080
Depreciation, Depletion and Amortization	15,131,178
Provision for Deferred Taxes	1,698,758
	<u>\$30,388,016</u>
Disposition of Funds:	
Cash Dividends	\$ 1,066,237
Capital Expenditures:	
Property, Plant and Equipment	6,662,000
Purchase of VisQueen Business	\$17,000,000; Less Inventories and
Accounts Receivable (Included in	Working Capital) \$4,800,000
Payment on Long-Term debt	12,576,120
Other Items (Net)	(2,116,341)
	<u>\$30,388,016</u>

At December 31, 1963, working capital was \$67,337,401, an increase of \$4,336,590 over the amount of March 31, 1963. The ratio of current assets to current liabilities at December 31, 1963 was \$3.36 to \$1.00.

Summary of Long-Term Debt

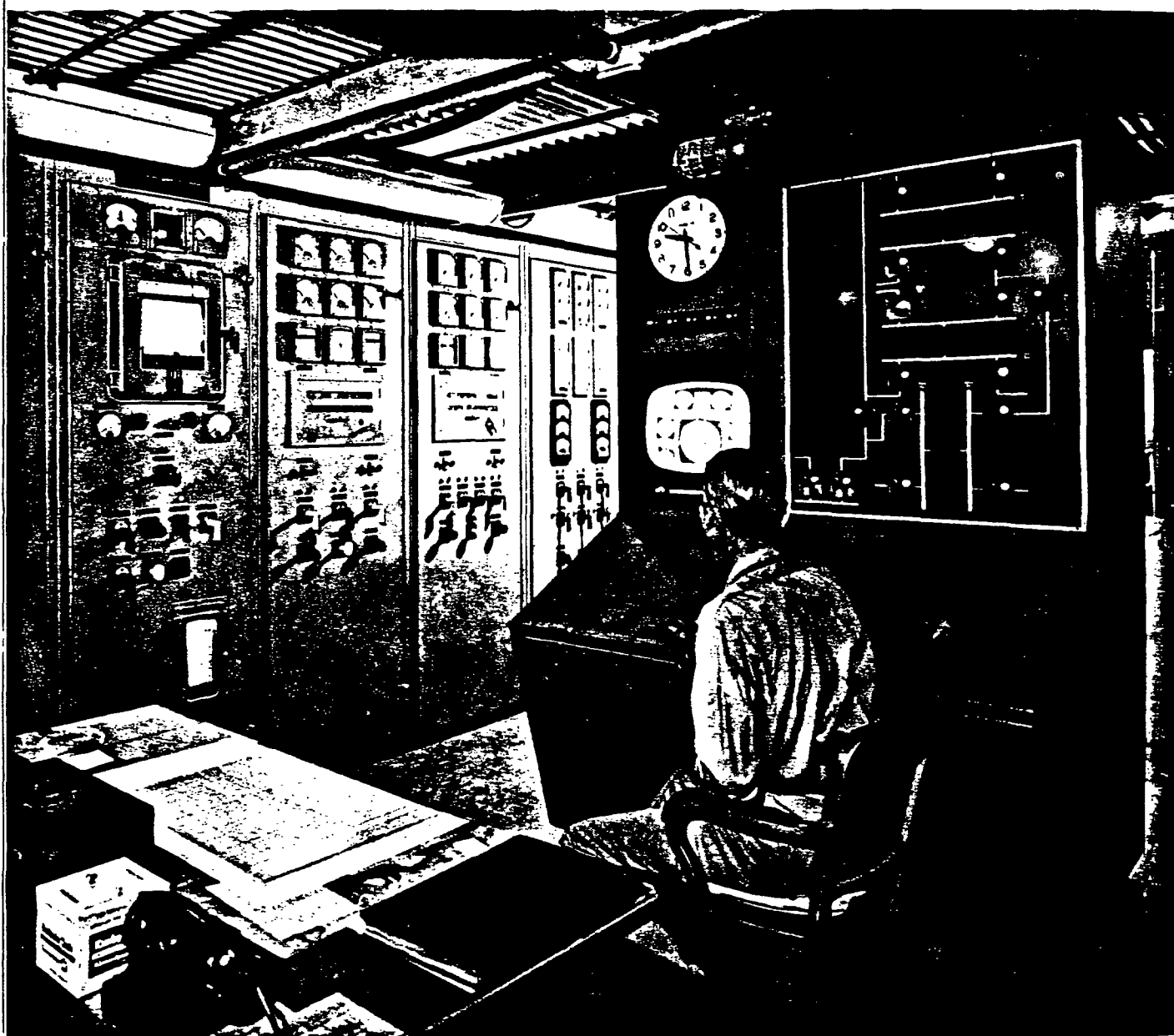
5½% Bank Loan—Due 1964-1970	\$ 8,000,000
The Chase Manhattan Bank	
5¼% Senior Notes—Due \$8,000,000 Annually 1965-1978	114,000,000
The Prudential Insurance Company of America	
The Equitable Life Assurance Society of the United States	
The Northwestern Mutual Life Insurance Company	
New York Life Insurance Company	
3¾% Guaranteed Notes—Due 1964-1970	4,799,954
Three Canadian Banks	
(This debt is owed by the Canadian subsidiary and is guaranteed by the parent company.)	
5¼% Subordinated Notes—Due 1964-1972	17,985,000
The Prudential Insurance Company of America	
The Equitable Life Assurance Society of the United States	
New York Life Insurance Company	
5¼% Subordinated Notes—Due 1979-1982	50,000,000
Privately Placed with Various Investors	
Total Debt at December 31, 1963	194,784,954
Current Portion of Debt	2,185,211
Long-Term Debt	<u>\$192,599,743</u>

15-Year Summary of Debt Maturities

	5½% Bank Loan Due 1970	5¼% Senior Notes Due 1978	3¾% Guaranteed Notes Due 1970	5¼% Subordinated Notes Due 1972	Total Annual Amount
1964	\$ 500,000	\$ —	\$685,211	\$1,000,000	\$ 2,185,211
1965	500,000	8,000,000	685,211	1,000,000	10,185,211
1966	750,000	8,000,000	685,211	1,000,000	10,435,211
1967	750,000	8,000,000	685,211	2,500,000	11,935,211
1968	1,250,000	8,000,000	685,211	2,500,000	12,435,211
1969	1,250,000	8,000,000	685,211	2,500,000	12,435,211
1970	3,000,000	8,000,000	688,688	2,500,000	14,188,688
1971	—	8,000,000	—	2,500,000	10,500,000
1972	—	8,000,000	—	2,485,000	10,485,000
1973-77	—	8,000,000	—	—	8,000,000
1978	—	10,000,000	—	—	10,000,000

5¼% Subordinated Notes Due 1982 are payable in the years 1979-1982.

Operations Review



ETC 16855

Manufacturing

During 1963, the chemicals manufacturing organization has continued to plan and install changes which have reduced costs. These include improving the utilization of facilities, materials and manpower to counteract the effects of rising costs of materials, increasing taxes and increasing wage rates.

In another move to reduce operating costs, the antiknock compound manufacturing plant at Pittsburg, Calif., was put on stand-by status. Production was shifted to other Company locations, with no reduction in service to customers.

New records were established in the production of both pulp and paper during 1963, and waste reduction and improved operating efficiencies helped reduce manufacturing costs. The use of chemical additives increased efficiency and output, and improved pulp and paper characteristics.

Plans for an \$11 million improvement program at the Roanoke Rapids, N. C., pulp and paper mill, including a new power plant, have been completed. The resulting improvements are expected to reduce manufacturing costs still further.

An electronic computer process control system was installed at the Roanoke Rapids, N. C., mill for on-line data logging and process analysis. The system contributes to a better understanding of the variables of papermaking and provides an automatic data processing capability for improved production scheduling.

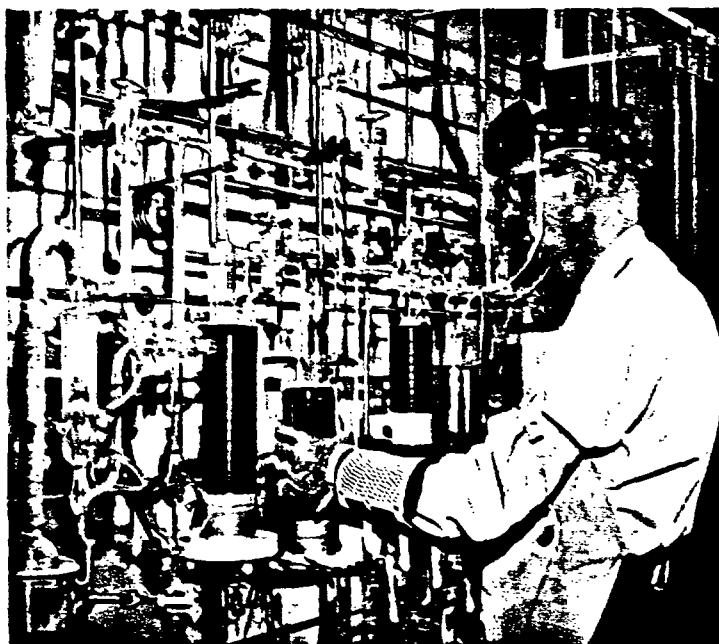
Skilled operators and precise controls help assure efficiency in chemical manufacturing operations.

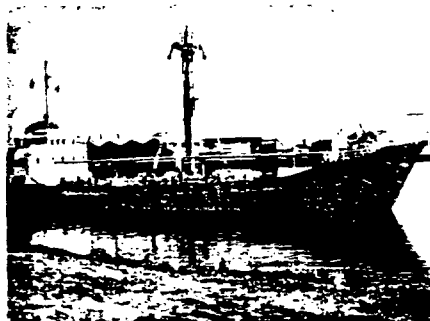
Advanced chemical research plays a big part in the Company's growth and expansion.

At the Raymond Bag division, changes in equipment and organization have been made to improve the organization's competitive position in the multiwall sack business and to put it in the all-plastic bag market by mid-1964. The addition of a new six-color press will enable Raymond to print on plastic bag materials and produce fine quality color printing on paper bags.

At the Albemarle Container plant, at Odenton, Md., a new corrugator and complementary equipment, to be installed in 1964, will enable the plant to compete more successfully in its area. The efficiency of the physical plant and organization at the Richmond Container facility is being increased by making changes recommended in recent industrial engineering studies.

At the Interstate Bag Company plant at Walden, N. Y., a long-range expansion program, including additions to





Bulk shipments of antiknock compounds in Ethyl's Chemical Trader save time and money for overseas petroleum refiners.

buildings and production equipment to increase manufacturing capacity and service capabilities, is continuing.

Pulpwood Supply and Forest Management

Purchases of pulpwood for use at the Albemarle mill at Roanoke Rapids, N. C., rose to slightly more than 500,000 cords during 1963, an increase of 11 percent. Of this amount, 155,000 cords, or 32 percent, were purchased in the form of chips from more than 50 sawmills and lumber plants.

Since truck shipment of pulpwood is more economical than rail, efforts are continuing to expand the use of truck shipments and to increase trucking efficiency.

The 200,000 acres of woodlands that the Company currently owns or holds under long-term lease were supplemented by the purchase of 1,745 additional acres, mostly in one large tract, within 50 miles of the mill.

Petroleum Chemicals

Company activities related to the sale of petroleum chemical products and their use by oil refiners—including the Ethyl Sales department and research and technical units — have been

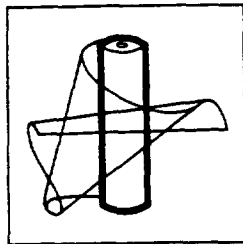
grouped together in a newly organized Petroleum Chemicals division. The division, which is responsible for the sale and service of all "Ethyl" additives for petroleum products in the United States, is backed by the entire Ethyl organization as it works closely with oil refiners. Besides providing dependable, on-time delivery of consistently high quality products, the Petroleum Chemicals division tailors to the requirements of individual refiners the services of Ethyl's research and development, technical service, safety, gasoline testing, market analysis, and advertising and sales promotion groups.

As part of its continuing efforts to develop, evaluate, recommend and supply antiknock compounds of maximum cost-effectiveness, the Company has conducted an extensive evaluation program during the year. Thousands of hours of laboratory tests and more than two million miles of road tests have been devoted to the program and the results have been discussed with oil refiners.

Fuel and engine research at laboratories in Detroit contribute to and new improved "Ethyl" additives for petroleum products.

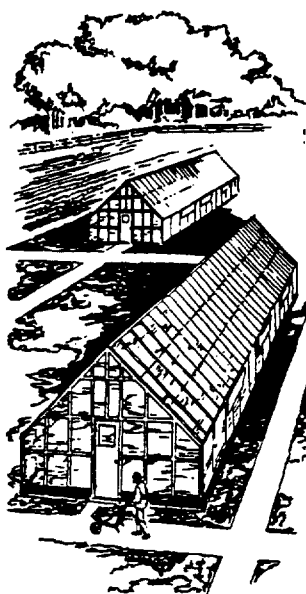


THE
VisQueen
STORY



This special insert is enclosed in
"VisQueen TnT," an exceptionally strong, clear, glossy
polyethylene packaging film.

ETC 16858



THE acquisition of the major portion of the "VisQueen" polyethylene film operations of Union Carbide Corporation's Visking division was a highlight of the year 1963. It makes Ethyl the leading manufacturer and marketer of this highly versatile and widely used plastic material.

Polyethylene film is used in building construction, agriculture, industry, around the home and in modern packaging—in everything from weather balloons to transparent vegetable bags, from drapery materials to painters' drop cloths.

Symbol of Quality

Included in the acquisition were three manufacturing plants, accounts receivable, inventories, certain contracts and patents, and exclusive rights in the United States to the "VisQueen" trademark, which is widely recognized as a symbol of quality in polyethylene film. Ethyl is continuing the production and sale of high quality polyethylene film under the "VisQueen" label.

Some 880 management, research, engineering, sales and production employees have joined the Ethyl organization. The "VisQueen" polyethylene film operations are the first part of the newly formed Ethyl Plastics division in commercial operation. They are headquartered in Baton Rouge, La., where the Company has extensive research, manufacturing and administrative facilities.

The Ethyl Plastics division is headed by Dr. Clarence M. Neher. Lloyd B. Andrew is general manager of the "VisQueen" polyethylene film operations, while Harry C. Byrne, Jr., is general sales manager and J. C. Wright is operations manager.

Popular Plastic

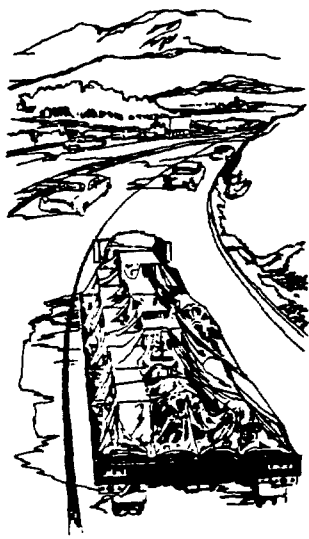
Polyethylene is one of the best known and most popular modern plastics, and its use is growing.

Two

Almost 2.2 billion pounds of polyethylene resin, the base material from which end products are made, were produced in the United States in 1963, about 12 percent more than the year before. Increasing demand is expected to push total production much higher in the next few years.

Film and sheeting are by far the largest uses for polyethylene resin, accounting for about 625 million pounds last year. This amount is expected to increase approximately 50 percent—to about 900 million pounds—by 1968.

About 70 percent of polyethylene film and sheeting is used for packaging. The building and construction industry takes about eight percent; agriculture five percent; and miscellaneous uses account for the remainder. Besides film and sheeting, polyethylene is used for wire and cable insulation; extrusion coatings on paper, paperboard and other substrates; plastic pipe; injection molding for toys and housewares; blow molded containers; and various other applications.

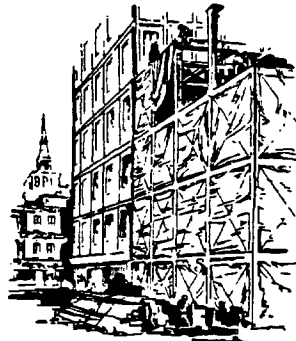


Contributed to War Effort

Polyethylene was developed in England during the 1930s. The first commercial production began in that country in September 1939, on the day that Germany invaded Poland to touch off World War II. Since polyethylene is a superior insulation material for submarine cable and for flexible, high-frequency cable for ground and airborne radar equipment, its production was accelerated and it made outstanding contributions to Allied war efforts. Sir Robert Watson Watt, the discoverer of radar, described polyethylene as having played an "indispensible part in the long series of victories in the air, on the sea, and on land, which were made possible by radar."

During the war, at the request of the United States government, the Visking Corporation, which had

Three



been established in 1925 to manufacture cellulose food casings for the meat packing industry, became the first to produce unsupported thin polyethylene film from polyethylene resin. Visking developed a unique melt-extrusion process, which produced film with uniformly controlled characteristics. Among the first uses for the film were weather-proof covers for guns and ammunition.

With the return of peacetime, the extreme versatility of "VisQueen" polyethylene film was quickly appreciated and its uses multiplied.

First Plant at Terre Haute

Visking's first plant to manufacture "VisQueen" polyethylene film was established at Terre Haute, Ind. The Company subsequently added film plants at Fremont, Calif., and Flemington, N. J. The Visking Corporation was acquired by Union Carbide Corporation in 1956, and during that ownership, a fourth plant at Cartersville, Ga., was added to the polyethylene film manufacturing operations.

Subsequently, the Federal Trade Commission directed Union Carbide to divest itself of the polyethylene film operations that were a part of the organization at the time of Carbide's acquisition of Visking. This opened up the opportunity for Ethyl to acquire the Terre Haute, Fremont and Flemington plants, associated operations, and the widely known and highly respected "VisQueen" name.

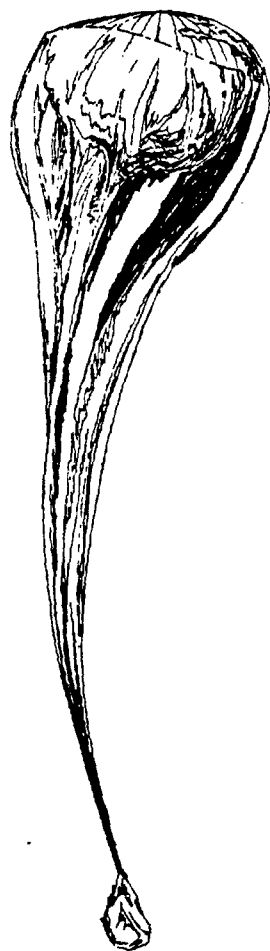


Obtained from Oil and Gas

In manufacturing "VisQueen" polyethylene film, Ethyl buys conventional polyethylene resin in the form of small pellets. The resin is produced by chemical and petroleum companies which manufacture it from ethylene gas, which in turn has been obtained from natural gas or crude oil. Polyethylene resin is shipped to the "VisQueen"

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to the "VisQueen"

plants in railroad hopper cars; in huge, collapsible,
black rubber shipping bags, with a capacity of
up to 10,000 pounds; and in multiwall paper
shipping sacks.

Depending on the desired characteristics in the
type of film to be made, polyethylene resin of
different types and certain concentrates are blended
together. These blends are subjected to heat and
the resulting "melt" is extruded as a tube of film
from a round die.

As the melt emerges from the die and starts to
cool, it is inflated to several times the die diameter.
The film is cooled by blowing cool air onto the outer
surface of the bubble from an air ring. The air
velocity, air temperature and point of contact of the
air on the bubble may all be varied to impart desired
properties to the finished film. For example, the
rate of cooling affects optical properties, with rapid
cooling giving a clearer, glossier film. The amount
of stretch applied by blowing the semi-cooled melt
into a bubble is an important factor in achieving high
impact and tensile strengths.

The film passes from the cooling system up into
a collapsing frame where rollers flatten the
cylindrical tube. The film passes over a series of
rollers to a windup, where it is wound on cardboard
cores. In the final stages, it may be treated to impart
printability, or may be slit, if desired.

Finally, all "VisQueen" film is carefully inspected
in a series of exacting quality control tests and is
packaged for shipment to customers throughout
the country.

Made into Bags

"VisQueen" film for the packaging industry is
sold primarily to converters who make it into bags
or other packaging units, print it with product
identification, brand names, trade marks and product
use instructions for ultimate consumers. Film for

Five

ETC 16862

the building and agricultural industries is distributed through dealers to farmers and contractors.

Edna produces the largest selection of polyethylene film types, qualities, forms, folds, colors, widths, thicknesses and patterns. It offers film from 1/4 inch to 40 feet wide and from 4/10 of a mil to 45 mils thick.

Readily Adaptable

Easy to handle, "VisQueen" polyethylene film is readily adaptable to many uses because of its strength, durability and economy. It is waterproof, odorless, nontoxic and flexible. It does not crack or stiffen when cold, resists tearing and is not affected by acids or alkalis.

These qualities are especially important in building construction, agricultural and household applications. In these areas, the film is used for such diverse purposes as temporary repairs and enclosures, painters' drop cloths, machinery, boat and outdoor furniture covers; insulation; hay, coal, silage and materials coverings; temporary greenhouses and shrub and lawn protection; irrigation ditch and pond lining; moisture barriers under concrete floors and in walls; and food wrappings.

Resistant to Sunlight

In many outdoor applications, black "VisQueen" film is used because of its superior resistance to strong sunlight.

When used as a mulch, black "VisQueen" reduces evaporation, prevents erosion, controls weeds and provides an atmosphere for enriching soil. The growth of selected crops is faster and the yield greater when soil is covered with such film.

Many of the same qualities which recommend "VisQueen" polyethylene film for building, agriculture and home use make it a superior



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superior



packaging material. In addition, its bright,
transparent qualities, which display packaged
products to good advantage, are attractive to
merchandisers.

Packages Everyday Products

"VisQueen" film is readily made into sturdy
attractive bags and wrappers for bakery goods, fruits,
vegetables, confections, laundry and dry cleaning,
clothes and other soft goods, hardware, novelties,
seed, fertilizers, chemicals and many other
everyday products.

Packages can be packed or stacked without
sticking together, and the good "slip" control of the
film means that it works well in packaging and
bag making machines. The material can be readily
sealed by the application of heat and pressure and
also can be sewn on standard sewing equipment.

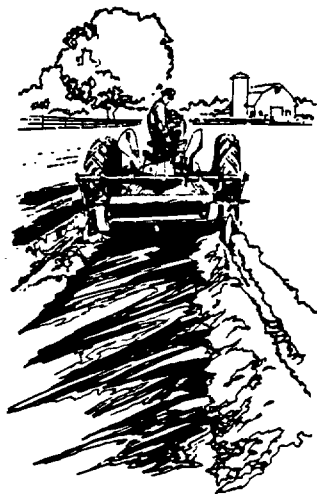
"VisQueen" films treated to impart printability
are highly receptive to ink.

In specialty applications, "VisQueen" film
is used in shipping synthetic rubber, to prevent
layers from sticking to one another, in automobile
doors as a moisture barrier to protect interior
upholstery, and as liners in drums of chemicals and
other products.

Used in Balloons

The unusual high quality, reliability and cold
temperature resistance of the film has led to its use
in high-altitude weather balloons. The balloons take
instruments aloft for meteorological studies that are
providing important data in the space age.

In another VisQueen development, a new
high-quality film, a copolymer mixture of
polyethylene and other basic plastics materials
known as "VisQueen 777," has recently been
introduced for use in plastic draperies. This film is



especially receptive to embossing and printing with attractive designs, is flame retardant, hangs well and has a good "hand." It is expected to be available in attractive drapes in thousands of retail outlets throughout the country.

Nationwide Sales Force

Orders for "VisQueen" polyethylene film of all types are channeled into the several plants from the experienced sales force operating throughout the country and headquartered in Baton Rouge, La. Besides introducing new films as they are developed, the sales force works closely with customers and potential customers—especially in the fast-growing building and agriculture and packaging fields—in the economical and efficient use of "VisQueen" film.

The addition of the "VisQueen" polyethylene film operations represents an important step in Ethyl Corporation's growth and diversification. It strengthens Ethyl's position in the packaging field, where the Company is a supplier of paper and converted paper products, and fits into the Company's position as a leading producer of intermediates for other plastics. At the same time, the Company looks forward to even further expansion in the areas of new plastic films and other packaging materials.

Industrial Chemicals

In another move to organize the Company on a divisional basis, activities related to the sale of chemicals other than petroleum additives have been grouped together in an Industrial Chemicals division. The products of this division include basic and specialized chemicals used in a variety of plastic, industrial, agricultural, household, national defense and other product areas.

Capitalizing on its extensive research and manufacturing experience in chlorinated hydrocarbons, the Company is entering the field of chlorinated solvents. Initial products consist of 1,1,1-trichloroethane, perchlorethylene and trichlorethylene, three chlorinated solvents widely used in dry cleaning and industrial degreasing. Facilities for the production of 1,1,1-trichloroethane are to be built at the manufacturing center at Baton Rouge, with completion scheduled for the fall of 1964. Other manufacturing facilities are planned for the future.

Another important addition to Ethyl's industrial chemicals will be the straight-chain primary alcohols for detergents and plastics to be made at a new plant now under construction at the Houston manufacturing center.

Plastics

To help implement the Company's plans for expansion and diversification in the polymer field, a Plastics division was created during the year, with headquarters at Baton Rouge, La.

The "VisQueen" polyethylene film operations, which were acquired late in the year and which are described in detail in a special insert in this report, are the first component part of the Plastics division in commercial operation.

Since it is a major producer of vinyl chloride monomer and vinylidene chloride monomer, both of which are



Stylish shopping bags made by the Interstate Bag division are popular with shoppers throughout the country.

plastics intermediates, and now is a leading manufacturer and marketer of polyethylene film, the Company is evaluating other new opportunities in polymers.

Ethyl International

The Company's interest in the growing overseas market for its products led to the formation, during 1963, of an Ethyl International division. The new division is responsible for the sale, distribution and service of petroleum and industrial chemicals, paper and plastic products in all countries outside the United States, except Canada. In that country, Ethyl Corporation of Canada Limited manufactures and markets "Ethyl" products.

While the Company's chemical and paper products have previously been sold in scores of foreign countries, Ethyl International is designed to capitalize on increasing foreign demand, resulting from fast growing industrialization in many parts of the world.

During the year, two more terminals were added to the three already in operation in the Caribbean-Latin American area to receive bulk shipments of antiknock compounds from the Ethyl tank ship "Chemical Trader."

Employee and Public Relations

Now a corporation of more than 7,000 employees at 14 manufacturing plants in 11 states and one in Canada, and at laboratories, offices, terminals and other locations, Ethyl and its subsidiaries enjoyed good labor and employee relations during 1963. Wages, salaries and benefit plans in the various parts of the organization continue to compare favorably with those prevailing in industries and areas where the Company operates. Safety records at all locations have continued to be good.

Ethyl and its subsidiaries have en-

joyed good public relations in plant communities, among shareholders, industry groups, the financial community and the general public. Active interest and participation by the Company and its people in community and industry affairs, and a continuing program which provides accurate, up-to-date information about corporate developments, have contributed to these good public relations.

Research and Development

In furthering the Company's plans for continuing growth, research and development activities are carried forward on a broad front. They include process improvements, product application and development, and the exploration of new product areas.

An outstanding accomplishment was the development of the process for the production of straight-chain alcohols used in detergents and plastics.

New applications for antioxidants and chemical intermediates from the Company's patented orthoalkylation process, including an anti-skinning agent for paint and components for herbicides, were introduced.

In petroleum chemicals, besides continuing to evaluate antiknock compounds, attention has been directed to new additives for lubricating oils and other products, with some introduced to sales or market testing and others undergoing more advanced research.

The catalyst developed by Ethyl to remove potential smog-forming materials from automobile exhaust gases is performing satisfactorily in continu-



Specially designed tank cars and efficient delivery services assure customers of dependable delivery of "Ethyl" chemicals.

Right: Sturdy, attractive multiwall sacks are manufactured by the Raymond Bag division at Middletown, Ohio, and Richmond, Va.

ing tests administered by the State of California. These tests are expected to be completed in 1964.

Continuing chemical research is devoted to: new exhaust gas catalysts; further development of antioxidants for petroleum products, food, feed, plastics, rubber and intermediates for the chemical industry; chlorinated hydrocarbons, including various solvents for dry cleaning, metal finishing and other uses; polymers and finished products derived from polyvinyl chloride, olefins, and vinylidene chloride; sodium derivatives; and petroleum additives of maximum cost-effectiveness and durability.

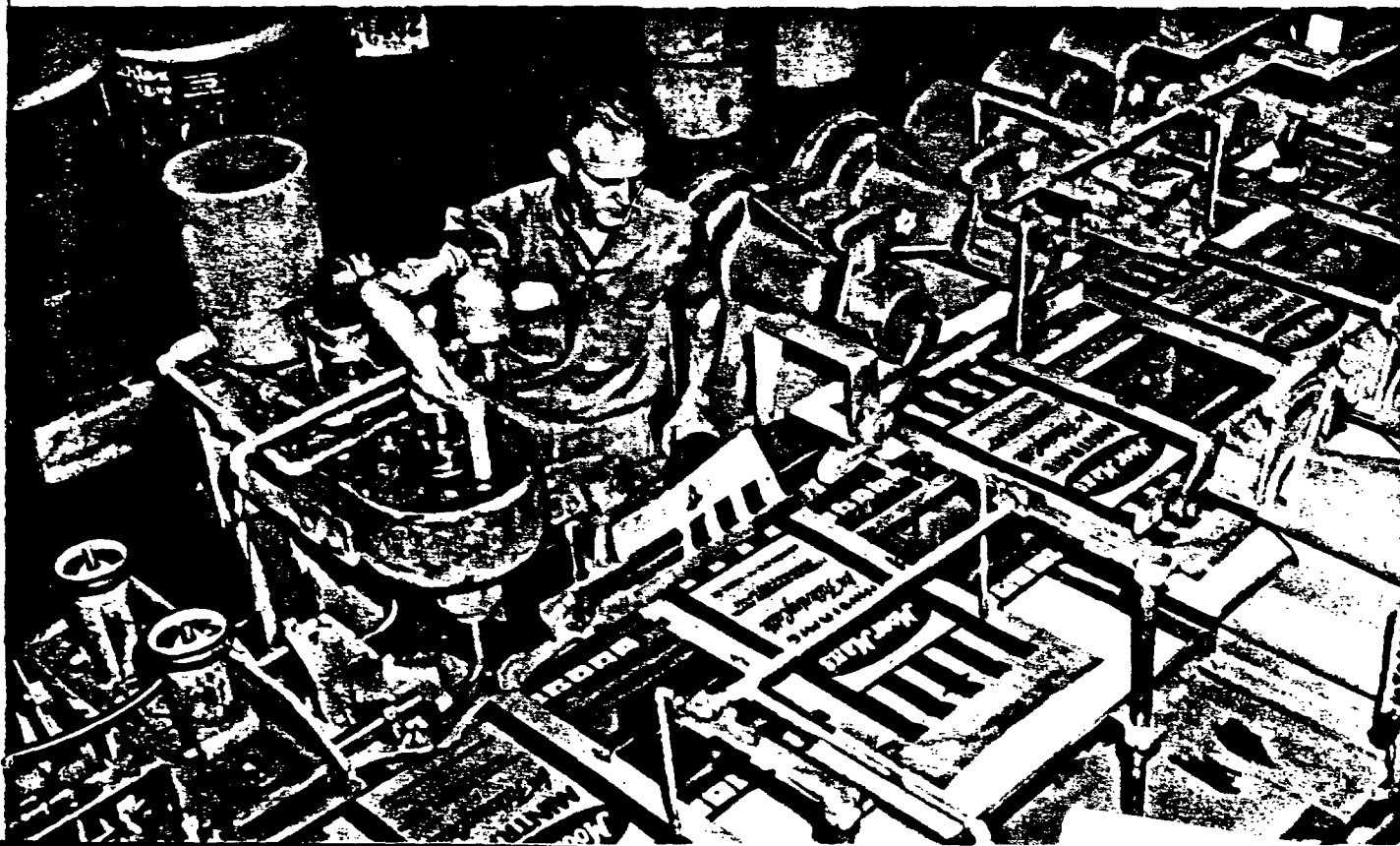
In paper and packaging, research and development are carried out on pulp, paper and converted products—with increased emphasis on product development. New products intro-

duced or undergoing market evaluation include: filtration papers for use in automotive and diesel locomotive engines; decorative and functional paper and paper board coatings for packaging; high-strength bag materials; and a variety of specialty kraft products.

New laboratories for packaging, filter and coatings research are going into operation early in 1964.

The Company continues to conduct research and development projects under the sponsorship of the federal government—primarily the Department of Defense. These include such product areas as missile propellant components and special weapons.

A total of 114 U. S. patents was granted to Ethyl in 1963. At the year end, the Company owned over 800 unexpired U. S. patents.



ETC 16868



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Ethyl

C O R P O R A T I O N

In addition to the offices, plants, laboratories and terminals indicated on the accompanying map of the United States and Canada, a number of individual representatives from Ethyl's petroleum chemicals, paper and plastics organizations are located throughout the country. Sales and service representatives and distributors represent the Company overseas. As the lower map indicates, Ethyl's products are sold in scores of countries around the world.

Legend

-  Executive Offices
-  Chemical Manufacturing Plants
-  Plastics Manufacturing Plants
-  Paper Manufacturing Plants
-  Research Laboratories
-  Gasoline Testing Laboratories
-  Storage Terminals
-  Regional Offices
-  District Offices
-  Paper Sales Offices
-  Plastics Sales Headquarters
-  Countries in which Ethyl Products are Sold

Financial Statements ▷

Consolidated Balance Sheets

December 31 and March 31, 1963

Assets

Current Assets:

	December 31 1963	March 31 1963
Cash	\$ 12,937,345	\$ 10,448,315
Short-Term Securities	21,935,596	30,335,051
Accounts Receivable	28,605,686	24,275,496
Inventories	30,995,395	32,229,961
Prepaid Expenses	1,341,503	1,784,548
Total Current Assets	95,815,525	99,073,371

Property, Plant and Equipment	189,481,921	174,871,590
Less: Accumulated Depreciation and Depletion . .	33,923,428	23,912,460
Net Property, Plant and Equipment . .	155,558,493	150,959,130

Investments in Affiliated Companies	7,270,439	7,177,722
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Deferred Charges and Other Assets	13,565,519	14,703,281
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Patents, Contracts and Other Intangibles	13,270,101	12,995,641
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	<u>\$285,480,077</u>	<u>\$284,909,145</u>
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ETHYL CORPORATION AND SUBSIDIARIES

Liabilities

Current Liabilities:

	December 31 1963	March 31 1963
Accounts Payable and Accrued Expenses . . .	\$ 16,094,794	\$ 16,375,126
Long-Term Debt—Current Portion	2,185,211	8,905,831
United States and Canadian Income Taxes . . .	10,198,119	10,791,603
Total Current Liabilities	28,478,124	36,072,560

Long-Term Debt	192,599,743	196,375,319
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Provisions for Deferred Income Taxes and Employee Benefits	12,253,909	9,939,474
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Stockholders' Equity

Capital Stock:

6% Cumulative Preferred, par \$100 per share . .	4,502,700	4,792,000
Class A Common, par \$3 per share	447,108	745,180
Class B Common, par \$3 per share	6,680,313	5,191,630
Capital Surplus	15,955,149	17,118,590
Retained Earnings	24,575,976	14,778,157
	52,161,246	42,625,557

Less, Preferred Stock in Treasury— 127 shares at December 31 and 1,018 at March 31 (at cost) . . .	12,945	103,765
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Total Stockholders' Equity	52,148,301	42,521,792
	<u>\$285,480,077</u>	<u>\$284,909,145</u>

Consolidated Statements of Income and Surplus

Statements of Income and Retained Earnings	Nine-Month Period Ended December 31 1963	Twelve-Month Periods Ended	
		December 31 1963	March 31 1963†
Income:			
Net sales	\$174,923,796	\$226,554,354	\$ 99,814,250
Miscellaneous income, net	1,502,052	2,154,701	1,007,782
	<u>176,425,848</u>	<u>228,709,055</u>	<u>100,822,032</u>
Costs and expenses:			
Costs of goods sold	119,691,201	154,791,015	72,902,380
Selling and general expenses	26,392,368	34,553,762	13,937,045
Interest & financing costs, long-term debt	9,141,999	12,246,198	5,146,876
United States & Canadian income taxes	10,555,000	13,560,000	4,455,000
	<u>165,780,568</u>	<u>215,150,975</u>	<u>96,441,301</u>
NET INCOME	10,645,280	13,558,080	4,380,731
Retained earnings at beginning of period	14,778,157	12,084,133	11,235,615
	<u>25,423,437</u>	<u>25,642,213</u>	<u>15,616,346</u>
Deduct:			
Cash Dividends			
Preferred stock	206,188	276,540	— 283,488
Common stock*	641,273	789,697	554,701
	<u>847,461</u>	<u>1,066,237</u>	<u>838,189</u>
Retained earnings at end of period	<u>\$ 24,575,976</u>	<u>\$ 24,575,976</u>	<u>\$ 14,778,157</u>
Statements of Capital Surplus			
Balance at beginning of period	\$ 17,118,590	\$ 17,118,590	\$ 4,315,050
Proceeds of warrants sold with 5 ³ / ₄ % Subordinated Notes due 1982	—	—	11,126,066
Excess of conversion price of debentures redeemed over par value of common stock issued	—	—	1,681,608
Excess of cash received over par value of 1,083 shares of Class B Common Stock issued under Stock Option Plan	27,761	27,761	—
Excess of cost over par value of preferred stock cancelled	(3,840)	(3,840)	(4,134)
Increase in par value of common stock outstanding resulting from change in par value from \$5 to \$3 per share and issuance of one additional share of Class B Common Stock for each common share outstanding	(1,187,362)	(1,187,362)	—
Balance at end of period	<u>\$ 15,955,149</u>	<u>\$ 15,955,149</u>	<u>\$ 17,118,590</u>

† Includes only four months of combined paper and chemical operations.

* At annual rates of \$.25 per share through April 1, 1963 (adjusted for two-for-one stock split of May 31, 1963), and \$.36 per share thereafter.

The accompanying notes are an integral part of these statements.

Notes to Financial Statements

1. Change in Fiscal Year

In July 1963, the Board of Directors authorized a change in the Company's fiscal year end from March 31 to December 31. For comparative purposes, this report includes income and surplus statements for the nine-month period ended December 31, 1963, the fiscal year ended March 31, 1963 and the twelve-month period ended December 31, 1963.

2. Acquisitions

Ethyl Corporation (Virginia), formerly Albemarle Paper Manufacturing Company, purchased all of the outstanding stock of, and merged with Ethyl Corporation (Delaware) on November 30, 1962. Accordingly, the accompanying financial statements include the assets and liabilities of the acquired corporation and the results of its operations subsequent to November 30, 1962.

Reference is made to "Capital Expenditures" on page 10 of this report for information concerning the Company's acquisition of the "VisQueen" polyethylene film business on November 30, 1963.

3. Inventories

Inventories include:

	December 31	March 31
Finished goods	\$10,660,747	\$11,202,288
Raw materials and work in process	16,025,652	17,122,480
Stores, supplies, etc.	4,308,996	3,905,193
	<u>\$30,995,395</u>	<u>\$32,229,961</u>

Inventories are stated at the lower of cost or market, with cost being determined on the last-in, first-out basis, with respect to approximately \$19,875,000 at December

31, 1963 and \$21,100,000 at March 31, 1963, and generally on an average cost basis with respect to the balance.

4. Investments in Affiliated Companies

Investments in unconsolidated affiliates are stated at cost and represent the Company's investments in and advances to Ethyl-Dow Chemical Co., a 50% owned company acquired on November 30, 1962, and Halifax Timber Company, a wholly-owned subsidiary organized to hold timber and timberlands. The Company's equity in the net assets of such affiliated companies at December 31, 1963 is approximately \$3,707,000. Dividends received exceeded the Company's equity in the net income of these companies by approximately \$45,000 in the nine-month period ended December 31, 1963, and \$77,000 in the fiscal year ended March 31, 1963, but were \$25,000 less in the twelve-month period ended December 31, 1963.

5. Property, Plant & Equipment

Property, plant and equipment is stated at cost as follows:

	December 31	March 31
Land	\$ 11,134,097	\$ 10,775,436
Timberlands and standing timber	4,049,512	4,097,231
Buildings	28,715,033	25,429,731
Machinery and equipment	145,583,279	134,569,192
	<u>\$189,481,921</u>	<u>\$174,871,590</u>

6. Deferred Charges & Other Assets

Deferred charges at December 31, 1963 include unamortized discount on long-term debt of \$10,493,017 (see Note 10), and other deferred financing expenses of \$2,096,563.

Notes to Financial Statements *continued*

7. Patents, Contracts & Other Intangibles

Patents and contracts with an unamortized cost basis of \$7,924,369 at December 31, 1963 are being amortized over their respective lives. Other intangibles are stated at cost of \$5,345,732.

8. Long-Term Debt

Reference is made to "Long-Term Debt" on page 9 of this report for information concerning the Company's borrowings.

9. Capital Stock

The Class A Common Stock is the Company's voting stock. As of December 31, 1963, there are 156,000 shares authorized, of which 149,036 shares are outstanding.

The Class B Common Stock has no voting privileges, except as required by law. As of December 31, 1963, there are 4,000,000 shares authorized, of which 2,226,771 shares are outstanding.

The 6% Cumulative Preferred Stock is callable prior to July 1, 1964 at \$101.50, and thereafter at \$101.00, and is entitled to annual sinking fund contributions of \$293,090. As of December 31, 1963, there are 100,000 shares authorized, of which 45,027 shares are outstanding and 127 shares are held in the Company's treasury.

A new Cumulative Second Preferred Stock was authorized on May 31, 1963. It consists of 250,000 shares, with par value of \$100 per share, none of which has been issued.

10. Warrants

Together with the issue on November 30,

1962 of the \$50,000,000 Subordinated Notes due 1982, the Company sold warrants which entitle the holders thereof to purchase 800,000 shares of unissued Class B Common Stock, \$3 par value, at \$13.75 per share. \$11,126,066 allocated as proceeds from the sale of warrants was added to capital surplus; a corresponding amount was recorded as discount on long-term debt and is being amortized.

The warrants are exercisable on or before November 1, 1982. As of December 31, 1963, none of the warrants had been exercised.

11. Stock Option Plan

Under the Company's restricted stock option plan, 300,000 shares of unissued Class B Common Stock were reserved for issuance to officers and other key employees. At March 31, 1963, options had been granted to purchase 269,000 shares at prices ranging from \$28.25 to \$38.50; during the nine months ended December 31, 1963, options to purchase an additional 17,600 shares were granted at prices ranging from \$37.25 to \$72.00. These options are exercisable in installments over periods up to 10 years. Options for 1,083 shares were exercised and options for 917 shares were cancelled, leaving options outstanding for 284,600 shares at December 31, 1963, of which options for 42,700 shares were then exercisable.

12. Restricted Payments

The Company's senior note agreement contains provisions which, in addition to other restrictions, limit the aggregate amount of prepayments on any subordi-

nated notes, cash dividends and expenditures for acquisitions of the Company's stock to 60% of consolidated net earnings, as defined, accumulated after April 1, 1962. At December 31, 1963, \$5,900,000 of retained earnings was available for such payments.

13. Depreciation, Depletion & Amortization

Depreciation and depletion charged to in-

come amounted to \$10,043,068 and \$13,196,918, respectively, for the nine-month and twelve-month periods ended December 31, 1963, and \$5,766,779 for the fiscal year ended March 31, 1963.

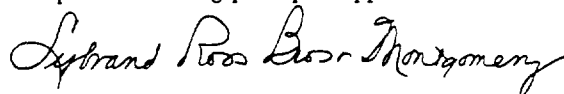
Amortization of intangibles and of deferred discount and financing expenses charged to income in the same three periods amounted to \$1,453,120, \$1,934,260 and \$789,113, respectively.

Auditors' Report

To the Board of Directors of Ethyl Corporation:

We have examined the balance sheet of Ethyl Corporation and its consolidated subsidiaries as of December 31, 1963, and the related statements of income and retained earnings and of capital surplus for the nine-month and twelve-month periods then ended. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We previously examined and reported upon the Company's consolidated financial statements for the fiscal year ended March 31, 1963.

In our opinion, the accompanying statements present fairly the financial position of Ethyl Corporation and its consolidated subsidiaries at December 31, 1963 and March 31, 1963, and the results of their operations for the nine-month and twelve-month periods ended December 31, 1963 and for the fiscal year ended March 31, 1963, in conformity with generally accepted accounting principles applied on a consistent basis.



New York, February 10, 1964

LYBRAND, ROSS BROS. & MONTGOMERY

Ten Years of Continuous Growth

	Year Ended December 31		
	1963	1963 ⁽¹⁾	1962
Sales and Income			
Net sales ⁽²⁾	\$226,554,354	\$99,814,250	\$48,578,227
Income before non-cash items and income taxes	42,249,258	15,391,623	5,776,220
Depreciation, depletion and amortization	15,131,178	6,555,892	2,294,903
Income taxes	13,560,000	4,455,000	1,719,051
Net income	13,558,080	4,380,731	1,762,266
Cash flow	30,388,016	12,117,007	4,211,875
Financial Condition			
Working capital	\$ 67,337,401	\$63,000,811	\$10,313,111
Ratio of current assets to current liabilities	\$3.36 to \$1.00	\$2.75 to \$1.00	\$3.29 to \$1.00
Property, plant and equipment (Net)	155,558,493	150,959,130	29,221,972
Expenditures for property, plant and equipment	18,862,000	4,838,805	4,820,189
Long-term debt	192,599,743	196,375,319	15,522,300
Common Stock			
Number of shares outstanding	2,375,807	1,187,362	1,029,674
Earnings per share ⁽³⁾	\$5.59	\$ 1.90	\$.73
Income taxes per share ⁽³⁾	5.71	2.06	.84
Dividends per share ⁽⁴⁾	.33 ¹ / ₄	.25	.25
Book value per share ⁽⁴⁾	\$20.06	\$15.93 ⁽⁵⁾	\$10.05

(1) Includes 4 months of combined paper and chemical operations.
All prior fiscal years represent paper operations only.

(2) Net sales are stated before deducting freight cost.

ETHYL CORPORATION AND SUBSIDIARIES

Fiscal Years Ended March 31						
1961	1960	1959	1958	1957	1956	1955
\$50,320,518	\$44,572,285	\$35,881,981	\$34,527,980	\$34,737,760	\$29,082,043	\$22,143,450
7,252,998	6,138,973	6,007,198	5,781,548	6,346,016	4,828,940	2,304,483
2,077,980	2,041,843	1,607,425	1,482,130	1,200,675	1,248,266	917,060
2,740,399	1,958,081	2,266,473	2,378,411	2,839,501	1,972,419	718,204
2,434,619	2,139,049	2,133,300	1,921,007	2,305,840	1,608,255	669,219
4,680,496	4,344,420	3,785,924	3,795,461	3,799,630	3,149,360	1,843,984
\$ 8,586,720	\$ 7,950,568	\$ 9,143,917	\$ 7,640,165	\$ 6,790,823	\$ 3,458,134	\$ 3,447,958
\$2.73 to \$1.00	\$3.22 to \$1.00	\$3.91 to \$1.00	\$3.92 to \$1.00	\$2.73 to \$1.00	\$1.64 to \$1.00	\$2.81 to \$1.00
28,336,492	27,742,696	24,512,702	20,015,076	18,231,910	13,821,610	11,854,463
2,644,359	5,291,737	6,099,122	2,957,526	5,557,245	3,009,303	1,451,386
13,092,000	13,178,500	13,793,100	8,700,000	9,109,043	5,248,392	4,824,262
976,956	971,803	760,992	699,761	621,020	542,880	271,440
\$1.06	\$.92	\$.96	\$.87	\$1.19	\$.89	\$.32
1.34	.96	1.17	1.23	1.58	1.20	.44
.25	.25	.25	.25	.18 ³ / ₄	—	—
\$9.57	\$8.75	\$8.14	\$7.29	\$6.63	\$5.36	\$4.47

(3) Based on the average number of shares outstanding in each year, adjusted for stock splits and stock dividends.

(4) Adjusted for two-for-one stock split of May 31, 1963.

(5) Includes addition to capital surplus of \$4.68 per share resulting from sale of warrants. See Note 10 in Notes to Financial Statements.

ETHYL CORPORATION

Officers

FLOYD D. GOTTWALD
Chairman of the Board

B. B. TURNER, President

FLOYD D. GOTTWALD, JR.
Executive Vice President

GEORGE F. KIRBY
Executive Vice President

WILLIAM R. PERDUE, JR.
Executive Vice President and Treasurer

JOSEPH A. COSTELLO, Vice President

BRUCE C. GOTTWALD
Vice President and Secretary

JOSEPH M. LOWRY, Vice President

MALCOLM P. MURDOCK, Vice President

FREDERICK P. WARNE, General Counsel

Directors

FLOYD D. GOTTWALD*

B. B. TURNER*

JOSEPH A. COSTELLO

S. DOUGLAS FLEET
Executive Vice President—Marketing
Albemarle Paper Manufacturing Company

BRUCE C. GOTTWALD*

FLOYD D. GOTTWALD, JR.*

FRANK A. HOWARD
Research Consultant, New York, N. Y.

GEORGE F. KIRBY*

JOSEPH M. LOWRY

ROBERT T. MARSH, JR.
Chairman of the Board
First and Merchants National Bank
Richmond, Va.

MALCOLM P. MURDOCK

LEWIS F. POWELL, JR., Partner
Hunton, Williams, Gay, Powell & Gibson
Richmond, Va.

WILLIAM R. PERDUE, JR.*

E. CLAIBORNE ROBINS, President
A. H. Robins Company, Richmond, Va.

S. BUFORD SCOTT, Partner
Scott and Stringfellow, Richmond, Va.

ERWIN H. WILL, Chairman of the Board
Virginia Electric and Power Company
Richmond, Va.

* Members of the Executive Committee

ALBEMARLE PAPER MANUFACTURING COMPANY (Wholly owned subsidiary) Headquarters: Richmond, Va.

Officers

FLOYD D. GOTTWALD
Chairman of the Board

FLOYD D. GOTTWALD, JR., President

KIRKWOOD F. ADAMS
Executive Vice President—
Pulp and Paper Manufacturing

S. DOUGLAS FLEET
Executive Vice President—Marketing

JOSEPH M. LOWRY
Executive Vice President and Treasurer

H. WATKINS ELLERSON, JR.
Vice President—Converting Manager

BRUCE C. GOTTWALD
Vice President and Secretary

C. RAYMOND HAILEY
Vice President—Budget Director

BRENTON S. HALSEY
Vice President—Planning

LAWRENCE K. NORTON
Vice President—Sales

CHARLES H. ROBERTSON, Vice President—
Industrial and Public Relations

KENNETH D. RUNNING, Vice President—
Assistant Manager, Roanoke Rapids Division

HUGH H. BAIRD, JR., Controller

Directors

FLOYD D. GOTTWALD

FLOYD D. GOTTWALD, JR.

KIRKWOOD F. ADAMS

M. LEBBY BOINEST, JR.
Paper Mill Superintendent
Roanoke Rapids Division

H. WATKINS ELLERSON, JR.

S. DOUGLAS FLEET

BRUCE C. GOTTWALD

C. RAYMOND HAILEY

THOMAS G. HARRIS
Manager, Timber Operations

JOSEPH M. LOWRY

LEWIS F. POWELL, JR.

CHARLES H. ROBERTSON

KENNETH D. RUNNING

B. B. TURNER

CHARLES L. WILLS
Chief Engineer
Roanoke Rapids Division

Paper Converting Divisions

RAYMOND BAG DIVISION
Middletown, Ohio

JOHN T. WALTON
Vice President—General Manager

DONALD R. RUSSELL
Vice President—General Sales Manager

RICHMOND CONTAINER DIVISION
Richmond, Va.

H. WATKINS ELLERSON, JR., Manager

ALBEMARLE CONTAINER DIVISION
Odenton, Md.

JOHN B. MARSCH, Manager

INTERSTATE BAG COMPANY
Walden, N. Y.

HARFORD K. STEEN
Chairman of the Board

GOBLE W. BRYANT, President

PARVIN E. CANTRELL
First Vice President

ETHYL CORPORATION OF CANADA LIMITED (Wholly owned subsidiary) Headquarters: Toronto, Ontario

Officers

B. B. TURNER, Chairman of the Board

ALAN C. TULLY, President

HOWARD J. PHILP, Vice President

BRUCE C. GOTTWALD, Secretary

WILLIAM R. PERDUE, JR., Treasurer

Directors

B. B. TURNER

ALAN C. TULLY

JOSEPH A. COSTELLO

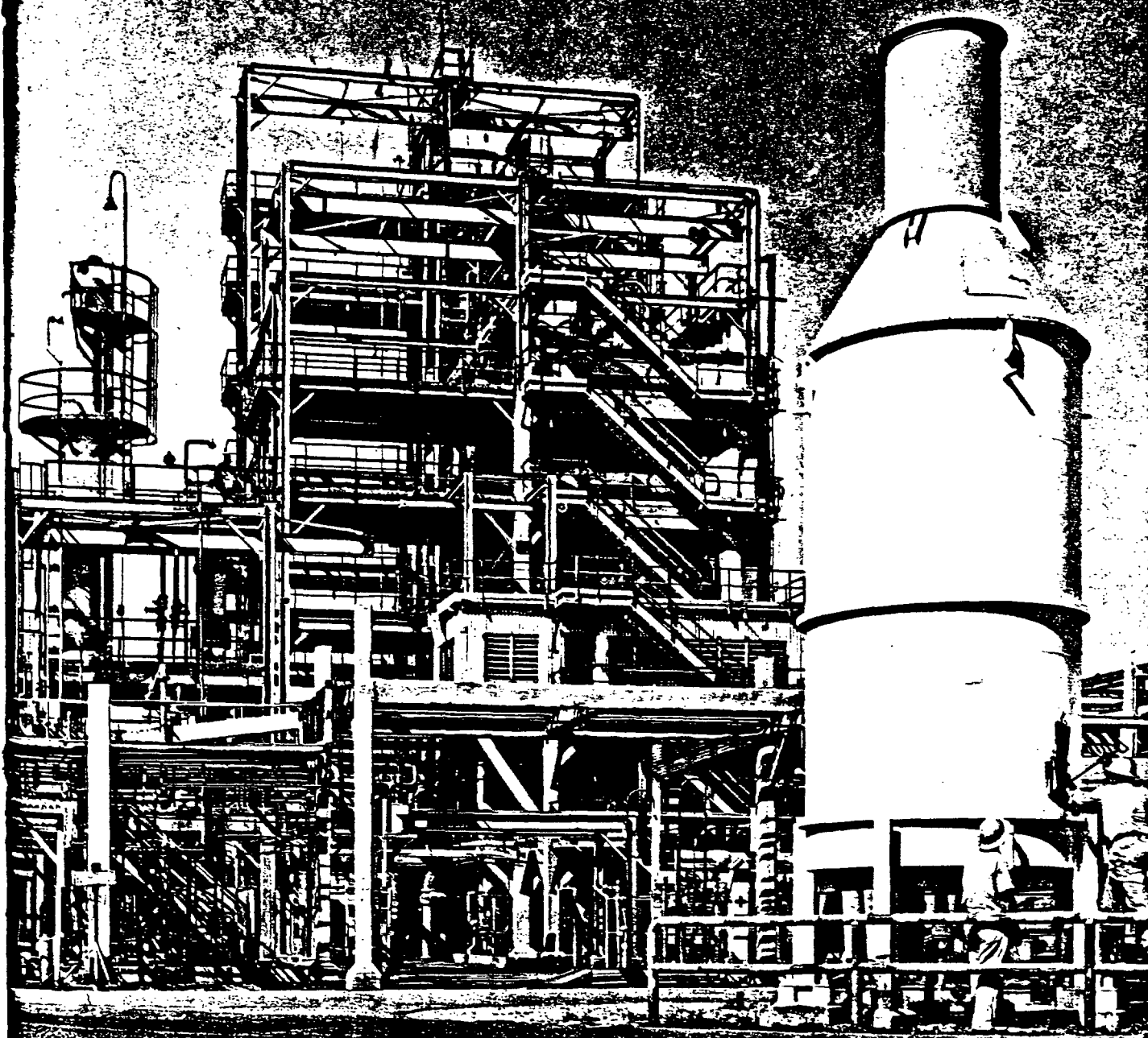
FLOYD D. GOTTWALD, JR.

GEORGE F. KIRBY

MALCOLM P. MURDOCK

WILLIAM R. PERDUE, JR.

HOWARD J. PHILP



In the United States, Ethyl's petroleum and industrial chemicals are produced at manufacturing plants at Baton Rouge, La., Houston, Texas, and Orangeburg, S.C.

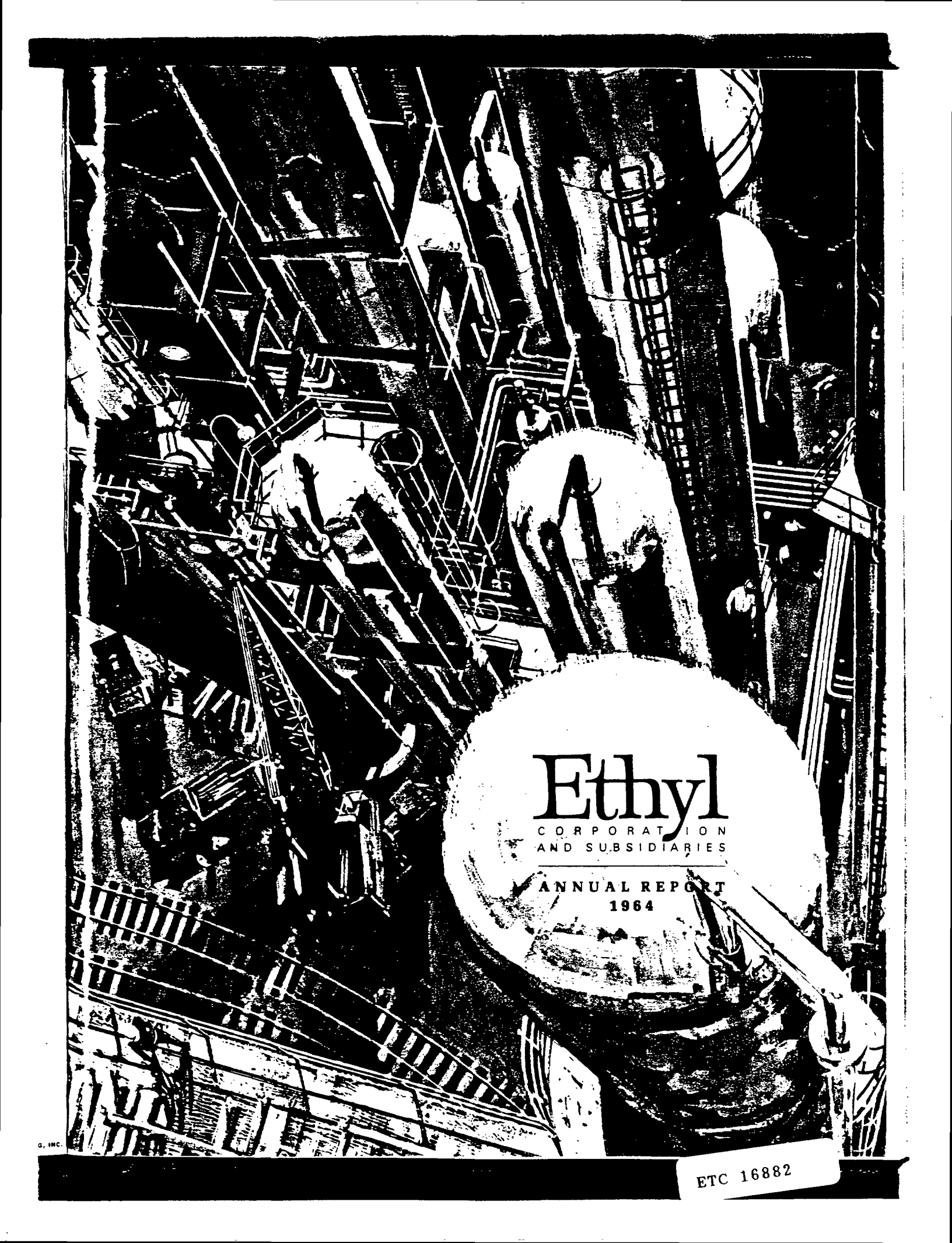
ETC 16880

Ethyl
CORPORATION

1963 ANNUAL REPORT

DESIGN: ROBERTS, REINHARDT & ONG, INC.

ETC 16881



Ethyl

CORPORATION
AND SUBSIDIARIES

ANNUAL REPORT
1964

ETHYL CORPORATION

OFFICERS AND STAFF

FLOYD D. GOTTWALD
Chairman of the Board

FLOYD D. GOTTWALD, JR.
Vice Chairman of the Board

GEORGE F. KIRBY
President

WILLIAM R. PERDUE, JR.
Executive Vice President
& Treasurer

BRUCE C. GOTTWALD
Executive Vice President
& Secretary

MALCOLM P. MURDOCK
Senior Vice President
Petroleum Chemicals

JOSEPH A. COSTELLO
Vice President
Industrial Chemicals,
Purchasing & Traffic

S. DOUGLAS FLEET
Vice President
Marketing Coordination

GLENN O. HAYES
Vice President
Manufacturing

ROBERT HERZOG
Vice President
Planning

JOSEPH M. LOWRY
Vice President
Special Assignments

KENNETH L. SWARTWOOD
Vice President
Research & Development

FREDERICK P. WARNE
General Counsel

JAMES E. BOUDREAU
Director of Public Relations

FRANK J. McNALLY
Director of Finance

G. SAMUEL ROBERTS
Chief Engineer

STEPHEN B. RODI
Director of Employee Relations

RUSSELL B. WESTON
Director of Advertising
& Sales Promotion

DIRECTORS

FLOYD D. GOTTWALD*
Chairman

FLOYD D. GOTTWALD, JR.*
Vice Chairman

JOSEPH A. COSTELLO

S. DOUGLAS FLEET

BRUCE C. GOTTWALD*

GEORGE F. KIRBY*

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Powell & Gibson
Richmond, Va.

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President
A. H. Robins Company
Richmond, Va.

S. BUFORD SCOTT
Partner
Scott & Stringfellow
Richmond, Va.

ERWIN H. WILL
Chairman of the Board
Virginia Electric
& Power Company
Richmond, Va.

*Members of Executive Committee

DIVISIONS

Petroleum Chemicals

MALCOLM P. MURDOCK
Senior Vice President

ROBERT A. DOUGLASS
General Sales Manager

RICHARD K. SCALES
Technical Director

Industrial Chemicals

JOSEPH A. COSTELLO
Vice President

JAMES M. GILL
General Manager

HARRY KUHE
Sales Manager
General Chemicals

Ethyl International

ALBERT B. HORN
Division Vice President
& General Manager

CHESTER D. CARTER
Division Vice President

WILLIAM J. RUSHER
President & Managing Director
Ethyl S. A.

Plastics

CLARENCE M. NEHER
Division Vice President
& General Manager

VISQUEEN DIVISION

LLOYD B. ANDREW
General Manager

HARRY C. BYRNE, JR.
General Sales Manager

JACK C. WRIGHT
Operations Manager

HOWARD L. LEVENTHAL
Technical Director

POLYMERS DIVISION

HARRY M. ZIMMERMAN
General Manager

TONNIE A. HOYLE
Sales Manager

**Ethyl Corporation
of Canada Limited**
(Canadian Division)
Wholly-owned subsidiary

ALAN C. TULLY
President

JOHN F. KOEHNLE
Vice President

ROBERT H. SHANNON
Manager/Chemical
Products Department

**Albemarle Paper
Manufacturing Company**
(Paper Division)
Wholly-owned subsidiary

FLOYD D. GOTTWALD
Chairman of the Board

FLOYD D. GOTTWALD, JR.
President

GOBLE W. BRYANT
Executive Vice President
& General Manager

KIRKWOOD F. ADAMS
Executive Vice President
Pulp and Paper Manufacturing

S. DOUGLAS FLEET
Executive Vice President
Marketing

JOSEPH M. LOWRY
Executive Vice President
& Treasurer

BRUCE C. GOTTWALD
Vice President

C. RAYMOND HAILEY
Vice President/Budget Director

BRENTON S. HALSEY
Vice President/Planning

LAWRENCE K. NORTON
Vice President/Sales

CHARLES H. ROBERTSON
Vice President/Industrial
& Public Relations

KENNETH D. RUNNING
Vice President/Ass't. Manager
Roanoke Rapids Division

HUGH H. BAIRD, JR.
Controller

W. DOUGLAS GOTTWALD
Secretary

RAYMOND BAG COMPANY

JOHN T. WALTON
Vice President/General Manager

DONALD R. RUSSELL
Vice President
General Sales Manager

ALBEMARLE CONTAINER COMPANY

JOHN A. COMLY
General Manager

ROBERT G. REDMAN
General Sales Manager

JOHN B. MARSCH
Sales & General Manager
Baltimore Plant

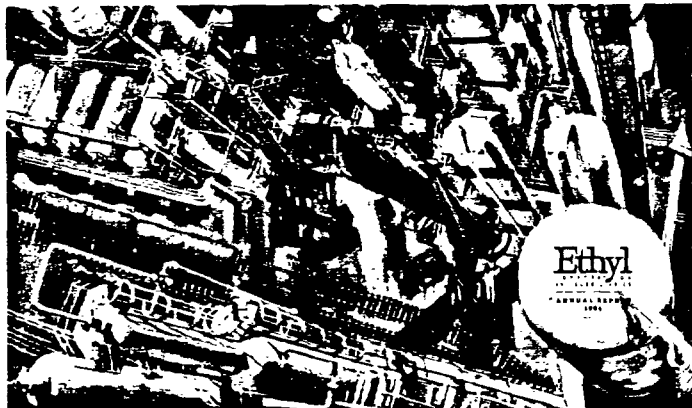
INTERSTATE BAG COMPANY

CLAUDE V. ALLEN
General Manager (Acting)

PARVIN E. CANTRELL
Vice President/Sales

ETHYL

C O R P O R A T I O N



1964 ANNUAL REPORT

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ANNUAL MEETING

The annual meeting of Ethyl Corporation shareholders will be held at the Company's executive offices in Richmond, Va., on Thursday, April 15, 1965. A formal notice of the meeting, together with a proxy statement, has been enclosed in one envelope with this report.

STOCK TRANSFER AGENT

First and Merchants National Bank,
Richmond, Va.

GENERAL COUNSEL

Hunton, Williams, Gay, Powell & Gibson,
Richmond, Va.

EXECUTIVE OFFICES

330 South Fourth Street, Richmond, Va.
100 Park Avenue, New York, N.Y.
Louisiana National Bank Building, Baton Rouge, La.

THE YEAR IN BRIEF

Consolidated net income increases to \$19,811,373 on record sales of \$277,478,496.

Synthetic primary alcohols plant and polyvinyl chloride resins plant nearing completion.

Overseas operations expanded and engineering of new Greek plant started.

Record paper tonnage produced; paper plants modernization continued.

New polyethylene film plant announced.

Chlorinated solvents business entered; 1,1,1-trichloroethane plant built.

Plastic pipe business acquired and expanded; plastic container subsidiary formed.

New industrial chemicals and antiknock compound facilities added at Canadian plant.

Cost reduction and efficiency improvement programs continued.

Corporate identity advertising program inaugurated.

FINANCIAL HIGHLIGHTS	Years Ended December 31	
	1964	1963
Net Sales	\$277,478,496	\$226,554,354
Taxes on Income	18,927,000	13,560,000
Net Income	19,811,373	13,558,080
Cash Flow	37,698,396	30,388,016
Net Income per Share of Common Stock . . .	\$2.32 ⁽¹⁾	\$1.59 ⁽²⁾
Cash Dividends		
Preferred Stock	259,658	276,540
Common Stock	1,514,453	789,697
Earnings Retained in Business	18,037,262	12,491,843
Depreciation, Depletion and Amortization . .	16,962,753	15,131,178
Capital Expenditures	20,809,000	18,862,000
Total Assets	316,838,017	285,480,077
Working Capital	79,714,992	67,337,401
Book Value per Share of Common Stock . . .	\$8.52	\$6.69 ⁽³⁾

(1) Based on 8,438,658 shares outstanding at December 31, 1964.

(2) Based on 2,375,807 shares outstanding at December 31, 1963, adjusted for 3-for-1 stock split in December, 1964 and 1,228,200 shares issued in 1964 upon exercise of warrants.

(3) Adjusted for three-for-one stock split in December, 1964.

To the Shareholders of Ethyl Corporation:



THE YEAR 1964 was a year of well-rounded growth for Ethyl Corporation—growth in recognition, in organization, in diversification, in research developments, in manufacturing facilities, in international operations and in sales and net income.

Consolidated net sales for the Company and its subsidiaries in 1964 totaled \$277,478,496. Net income amounted to \$19,811,373, or \$2.32 per share on the 8,438,658 shares of common stock outstanding at the year end.

For the year 1963, we reported sales of \$226,554,354 and net income of \$13,558,080, or \$1.59 per share, adjusted to a basis comparable to 1964.

Thus, sales increased 22 percent in 1964 over the preceding year and net income increased 46 percent. The increased dollar volume of sales resulted from greater demand for most of the Company's established products, from the first full year's sales of "Vis-Queen" polyethylene film, and from sales of other new products. At the same time, all parts of the organization continued to pursue cost reduction and efficiency improvement programs, and these programs had a good effect on net income.

Our expansion and diversification program is moving ahead successfully. As a result, Ethyl is now a broad-based chemical company, with substantial interests in other product areas and a growing product line.

In Plastics, we have entered the plastic pipe and plastic container fields and expanded plastic film operations. We are building a new film plant at LaGrange, Ga., to supply the growing Southeastern market.

At Baton Rouge, we have under construction a new facility to manufacture a full line of polyvinyl chloride resins and compounds, the materials from which many plastic products are made. The polyvinyl chloride business is quite competitive, but it has a strong growth rate. It offers a natural expansion of our operations, since Ethyl is a leading producer of vinyl chloride monomer, the intermediate from which PVC resins are made. To help meet the growing demand for vinyl chloride monomer, we are substantially increasing the capacity of production facilities at both the Houston and Baton Rouge manufacturing centers.

A major industrial chemicals growth project is the synthetic primary alcohols plant which is nearing completion at Houston. A product largely of Ethyl research and engineering, this plant is expected to make an important addition to our business when it goes

into production later this year. Initial products will be alcohols for use in biodegradable detergents and plastics, but the technology also suggests several potential new chemicals.

Further chemicals diversification has come from the Company's successful entrance into the chlorinated hydrocarbons business and the completion of new facilities at the Canadian plant at Sarnia, Ontario, to make industrial chemicals for Canadian industries.

Expansion and modernization in our paper operations include construction of a new power plant at the Albemarle mill at Roanoke Rapids, N.C.; other projects there to improve manufacturing efficiency and effect production economies; and new equipment at other mills and paper products plants.

Overseas, our sales, operations and facilities are growing rapidly. The new plant to manufacture antiknock compounds, vinyl chloride monomer and related chemicals in Greece is under way and scheduled for completion in 1966. Ethyl S. A., our new European sales, service and distribution subsidiary, is in operation and delivering products through the recently completed storage and shipping terminal at Dordrecht, Holland, and a related distribution system. In several other areas, our activities are increasing and attractive new opportunities are being developed.

To focus attention on Ethyl's emergence as a diversified company, we started a new corporate advertising program during the year. The full-page, full-color advertisements in the program appear regularly in widely-read national magazines, pointing out that Ethyl is an imaginative, growing, research-oriented corporation.

We were saddened by the death, in late September, of Frank A. Howard. Mr. Howard was a founder and, for a time, first vice president of Ethyl Corporation (Delaware), one of the present Company's major predecessors. He was a member of that Company's board of directors from its incorporation in 1924 until 1962, and continued to serve on the Ethyl Corporation (Virginia) board until the time of his death.

During the year, there was increased interest in, and emphasis on, the cleanliness of the air in a number of cities across the country. Investigations explored the various factors involved, including automobile exhaust gases. Scientific evidence presented in the course of these investigations was based, in part, on thorough research programs in which Ethyl has been a leader. This evidence clearly shows that lead alkyl antiknock compounds in automotive gasoline do not contribute to smog formation, or add harmful contents to the atmosphere, and are completely safe from both industrial and public health standpoints.

However, increasing attention is being devoted to substantially reducing the volume of unburned hydrocarbons and carbon monoxide in exhaust gases. Recently, detailed fuel and engine studies, including those conducted by the experienced Ethyl research organization, have demonstrated that such a reduction can be accomplished by various methods—without the high cost to motorists that would be involved in modifying fuels.

As the Financial Review section of this report points out, cash flow—at the rate of about \$38 million a year in 1964—is providing ample funds for orderly debt retirement



George F. Kirby, president, and
Floyd D. Gottwald, chairman of
the board of directors.

and for dividend payments, and also provided in 1964 about \$25 million for capital expenditures. At the year end, the Company had working capital of \$79,714,992. This is substantially in excess of our operating needs—and also well in excess of the specifications of loan agreements. These funds are being put to work in capital projects to further our growth.

In the future, the Company plans to strengthen its position in present product lines and to continue its program of expansion and diversification. We are counting on the achievements of our capable and imaginative Research and Development department and on acquisitions as the basis for this expansion and diversification.

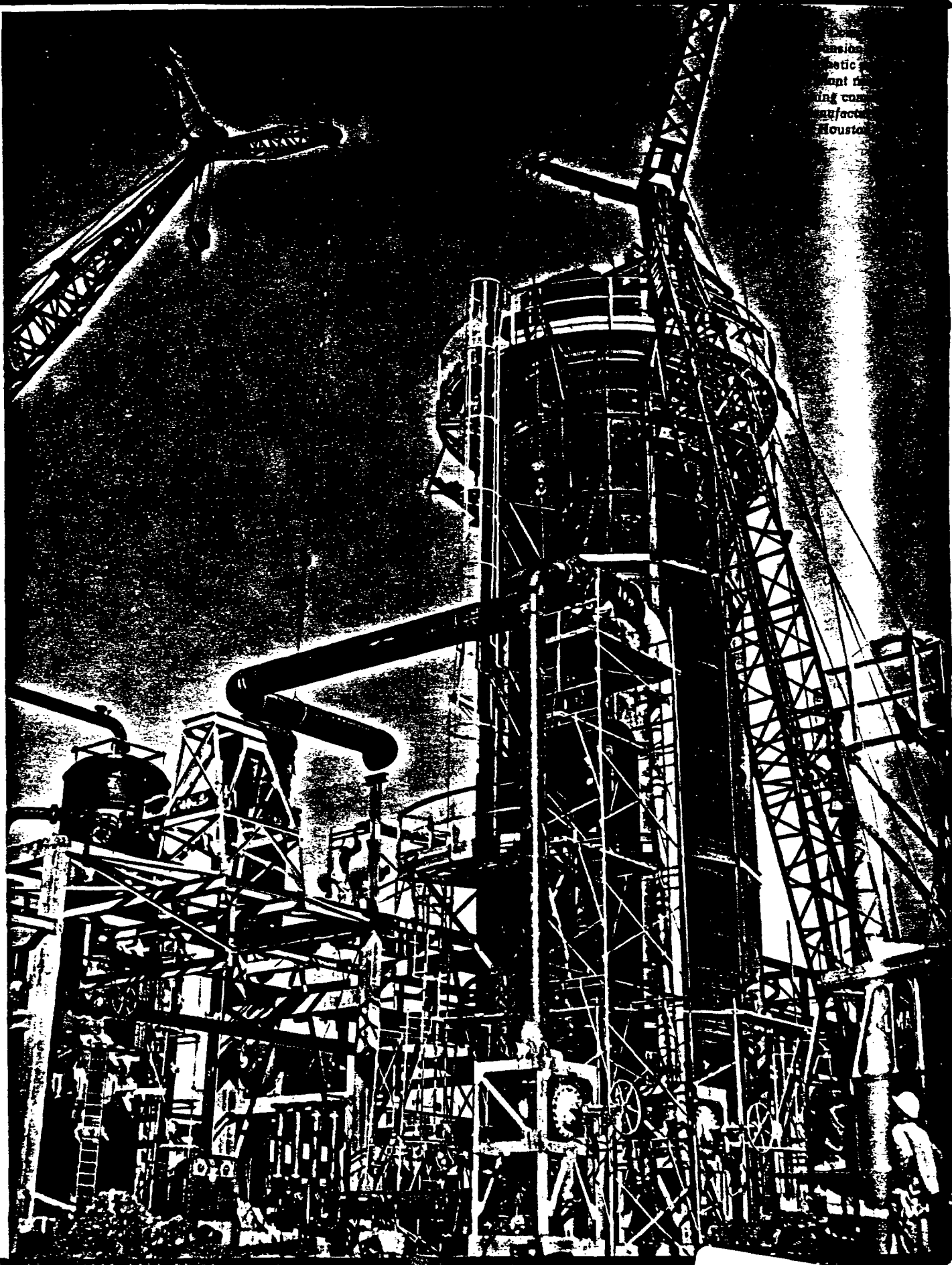
Assuming a continued good economic climate and reasonably successful start-up of new plants, we look for continued improvement in sales and earnings in 1965. We anticipate increased demand for the Company's present products and good initial sales of products from the new plants that come on stream during the year.

In reviewing past accomplishments and planning for the future, we recognize the important part that Ethyl's employees play in all phases of the Company's operations. We want to express our thanks to these employees for their outstanding contributions and to acknowledge also our indebtedness to shareholders, suppliers and customers for their confidence and support in the past and their anticipated cooperation in the years ahead.

George F. Kirby
President

Floyd D. Gottwald
Chairman of the Board

Gas
Electric
Plant
Engineering
Company
Houston



ETC 16889

FINANCIAL REVIEW

Sales and Net Income

With demand increasing for the products in the Company's varied line, and new products providing good results, consolidated net sales rose more than \$50 million in 1964, to \$277,478,496. This was a 22 percent gain over sales of \$226,554,354 in 1963.

Sales trends in petroleum chemicals, industrial chemicals, paper, plastics products, and in the Company's Canadian and international operations—and the factors influencing them—are discussed under their respective headings in the Operations Review section of this report, starting on page 16.

While sales were increasing, net income also increased substantially, rising to \$19,811,373 in

1964, from \$13,558,080 in 1963. This was a gain of \$6,253,293, or 46 percent.

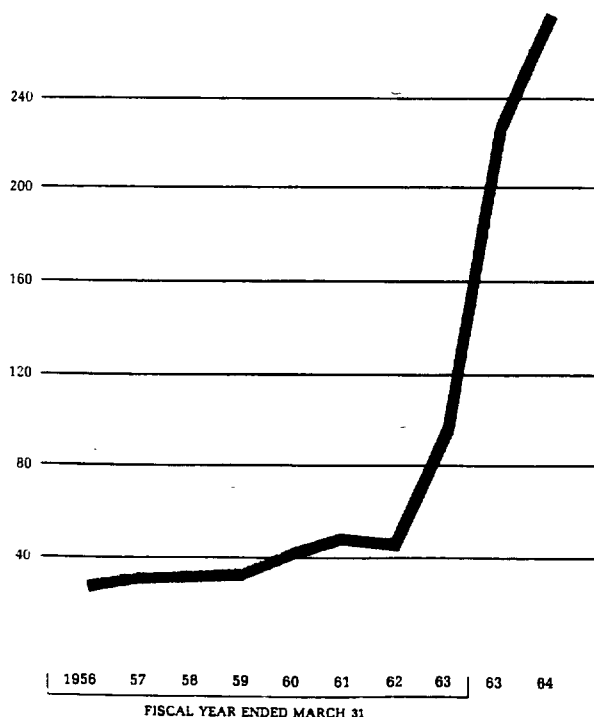
Based on the 8,438,658 shares of Class A and Class B common stock outstanding at the year end, net income per share amounted to \$2.32 in 1964. This compares to \$1.59 per share in 1963 (based on shares outstanding at the end of 1963, adjusted for the three-for-one stock split in December, 1964 and 1,228,200 shares issued in 1964 upon exercise of warrants).

All parts of the organization continued to pursue cost reduction and efficiency improvement programs. At the same time, interest costs were less

NET SALES

Year Ended December 31

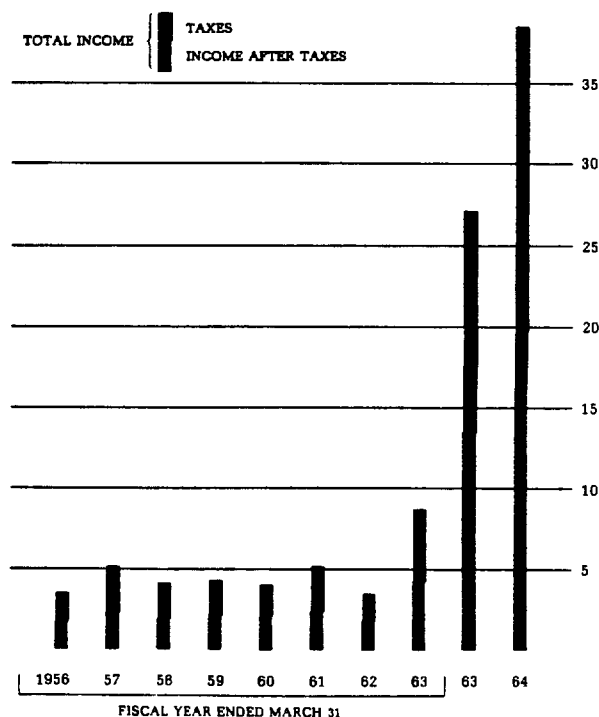
MILLIONS OF DOLLARS



NET INCOME AND TAXES

Year Ended December 31

MILLIONS OF DOLLARS



than they had been in the previous year, dropping to \$11,055,029 in 1964, from \$11,511,195 in 1963.

Capital Stock and Dividends

In October 1964, the Company received \$5,580,850 from the issuance of 405,880 new shares of Class B common stock. Registration and other expenses of \$210,783 reduced this amount to \$5,370,067, which was added to working capital.

The new shares, which were sold to the public by an underwriting group, were issued upon the exercise of outstanding warrants. These warrants had been sold to various institutional and private investors with 5³/₄% Subordinated Notes due 1979-1982 in connection with financing the acquisition of Ethyl Corporation (Delaware) by Albemarle Paper Manufacturing Company on November 30, 1962.

At a special meeting held on December 30, 1964, shareholders approved an increase in the number of authorized Class B common stock shares from 4,000,000 to 12,000,000 and a reduction from \$3 to \$1 in the par value of shares of both Class A and Class B common stock. At the same meeting, shareholders also approved a three-for-one split in the common stock which provided for shareholders to receive two additional shares of Class B common stock for each share of Class A or Class B common stock held by them. These changes were effective December 31, 1964.

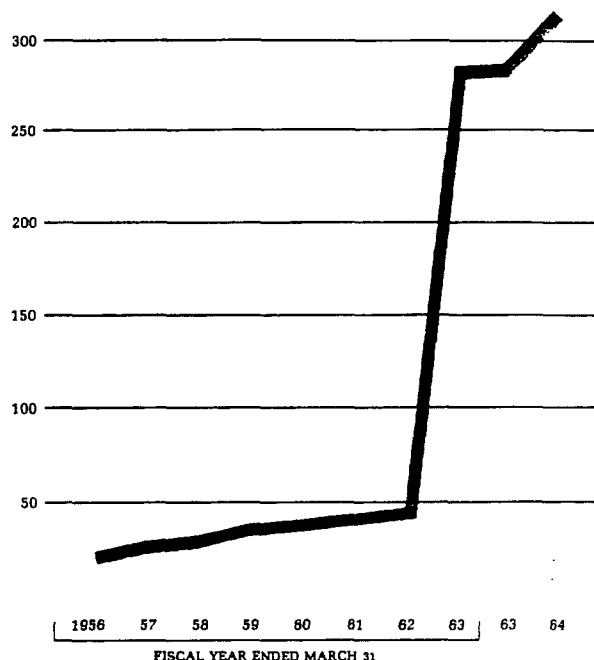
With the issuance of the additional Class B shares in connection with the stock split, and 1,311,237 (adjusted for split) Class B shares upon the exercise of the warrants and employees' stock options, there were 8,438,658 shares of Class A and Class B common stock outstanding at December 31, 1964.

While it is the Company's policy to retain most of net income to finance growth and diversification, cash dividends totaling \$1,774,111 were paid or declared on the common and preferred stock in 1964.

TOTAL ASSETS

Year Ended December 31

MILLIONS OF DOLLARS



Quarterly cash dividends paid on January 1, 1965, and voted for payment on April 1, 1965, are at the rate of \$.08¹/₃ per share, or an annual rate of \$.33¹/₃ per share on the split shares of both classes of the Company's common stock, and \$1.50 per share, or an annual rate of \$6 per share, on all series of preferred stock. This is double the rate paid on the common stock in the last two payments in 1964 and the same rate that had been paid on the preferred stock.

During the year, contributions of \$293,090 were made into the Sinking Fund required for retirement of cumulative preferred stock. The Treasury Stock (246 shares), as shown in the December 31, 1964 balance sheet on pages 24 and 25 of this report, will be used to satisfy, in part, the 1965 Sinking Fund requirements.

At the special meeting on December 30, 1964, shareholders also approved an increase from \$25 million to \$50 million in the authorized amount of the Company's cumulative second preferred stock. None of this stock has been issued, but it is available for possible future financing needs.

Source and Disposition of Funds and Change in Working Capital

The following tabulation shows the source and disposition of funds for the year 1964:

Source of Funds	
Net Income	\$19,811,373
Depreciation, Depletion and Amortization	16,962,753
Increase in Deferred Taxes	924,270
Proceeds from the Exercise of Warrants and Employees' Stock Options	6,221,843
Other Items	1,025,674
	<u>\$44,945,913</u>
Disposition of Funds	
Cash Dividends	\$ 1,774,111
Long-term Debt Paid in 1964	2,185,211
Additional Provision for 1965 Payments	8,000,000
Capital Expenditures	20,609,000
Increase in Working Capital	12,377,591
	<u>\$44,945,913</u>

Cash flow (Net Income plus Depreciation, Depletion and Amortization and Deferred Taxes)—at the rate of \$37,698,396 in 1964—is providing ample funds for dividend payments and debt retirement and substantial funds for capital expenditures. (See "Capital Stock and Dividends", "Capital Expenditures" and "Long-Term Debt.")

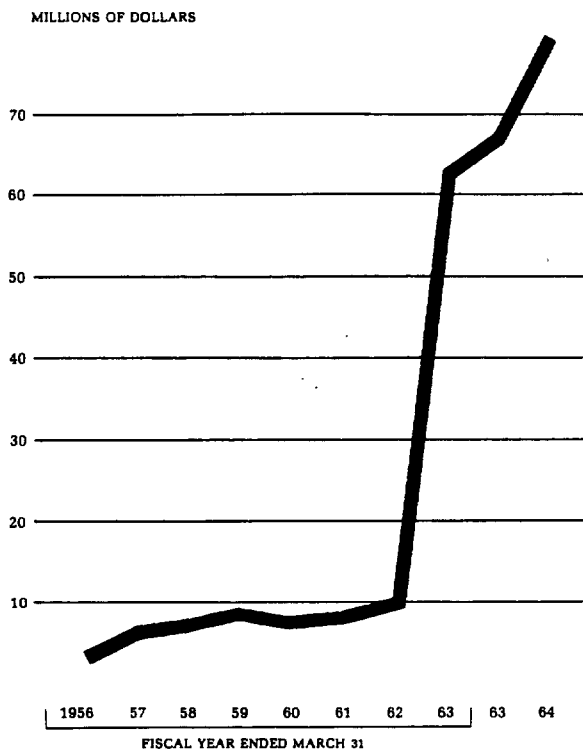
At December 31, 1964, working capital was \$79,714,992, an increase of \$12,377,591 over working capital of \$67,337,401 at the end of 1963. The ratio of current assets to current liabilities at December 31, 1964 was \$2.75 to \$1.00, compared to a ratio of \$3.36 to \$1.00 at the end of 1963.

Capital Expenditures

During 1964 capital expenditures totaled \$20,609,000. Most of this amount was spent on increased efficiency in the production of antiknock compounds and on modernization and expansion of, and additions to, facilities to produce industrial chemicals, paper and plastics products in connection with the Company's planned program of diver-

WORKING CAPITAL

Year Ended December 31



sification and expansion. The major construction projects under way at the present time, as well as newly operational facilities—all of which are expected to make important contributions to increased sales and net income—are listed below.

Project	Location	Completion Date	Estimated Cost
Synthetic Primary Alcohols Plant	Houston, Texas	Mid-1965	\$17 million
Polyvinyl Chloride Resins and Compounds Plant	Baton Rouge, La.	Mid-1965	\$ 8 million
Antiknock Compound and Chemicals Plant	Thessaloniki, Greece	1966	\$11 million
Power Plant	Roanoke Rapids, N. C.	Fall 1965	\$ 5.4 million
Modernization and Expansion of Pulp and Paper Mill	Roanoke Rapids	1966	\$ 6.7 million
1,1,1-Trichloroethane Unit	Baton Rouge	Completed	\$ 1.2 million
Industrial Chemicals Plant	Sarnia, Ontario	Completed	\$.9 million
New Antiknock Facilities	Sarnia	Mid-1965	\$.5 million
VisQueen Film Plant	LaGrange, Ga.	Fall 1965	\$ 2.5 million
Expansion of Vinyl Chloride Facilities	Baton Rouge and Houston	1966	\$ 4.7 million

Long-Term Debt

In accordance with the debt repayment schedule, payments totaling \$2,185,211 were made to reduce the Company's long-term debt during 1964. These payments included \$500,000 on the 5½% Bank Loan due 1970; \$685,211 on the 3¾% Guaranteed Notes due 1970; and \$1,000,000 on the 5¾% Subordinated Notes due 1972.

Since the Ethyl-Albemarle merger in November

1962, a total of more than \$14 million of debt has been paid. As a result, the long-term debt now stands at \$182,414,532.

The various elements comprising the Company's long-term debt and the amounts falling due in each of the coming years are shown in the accompanying tables, "Summary of Long-Term Debt" and "Summary of Debt Maturities."

SUMMARY OF LONG-TERM DEBT

5½% Bank Loan—Due 1968-1970	\$ 7,500,000
The Chase Manhattan Bank	
5¾% Senior Notes—Due \$1,000,000 Annually 1968-1970	114,000,000
The Prudential Insurance Company of America	
The Equitable Life Assurance Society of the United States	
The Northwestern Mutual Life Insurance Company	
New York Life Insurance Company	
3¾% Guaranteed Notes—Due 1968-1970	4,114,743
Three Canadian Banks	
(Owed by Canadian subsidiary and guaranteed by parent company)	
5¾% Subordinated Notes—Due 1968-1970	18,985,000
The Prudential Insurance Company of America	
The Equitable Life Assurance Society of the United States	
New York Life Insurance Company	
5¾% Subordinated Notes—Due 1970-1982	50,000,000
Privately Placed with Various Investors	
Total Debt at December 31, 1964	192,599,743
Current Portion of Debt	10,185,211
Long-Term Debt	<u>\$182,414,532</u>

SUMMARY OF DEBT MATURITIES

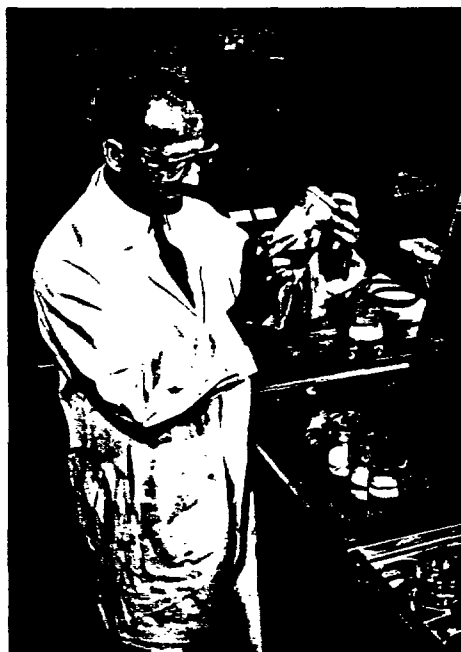
	5½% Bank Loan Due 1970	5¾% Senior Notes Due 1970	3¾% Guaranteed Notes Due 1970	5¾% Subordinated Notes Due 1972	Total Annual Amount
1965	\$ 500,000	\$ 8,000,000	\$685,211	\$1,000,000	\$10,185,211
1966	750,000	8,000,000	685,211	1,000,000	10,435,211
1967	750,000	8,000,000	685,211	2,500,000	11,935,211
1968	1,250,000	8,000,000	685,211	2,500,000	12,435,211
1969	1,250,000	8,000,000	685,211	2,500,000	12,435,211
1970	3,000,000	8,000,000	688,688	2,500,000	14,188,688
1971	—	8,000,000	—	2,500,000	10,500,000
1972	—	8,000,000	—	2,485,000	10,485,000
1973-77	—	8,000,000	—	—	8,000,000
1978	—	10,000,000	—	—	10,000,000

5¾% Subordinated Notes Due 1982 are payable in the years 1979-1982.

Top Photo: Chlorinated solvents for dry cleaning and metal finishing were among Ethyl's new products in 1964.

Bottom Left: New product application studies include research into the use of synthetic primary alcohols in detergents.

Bottom Right: Frequent checks by skilled operators—and laboratory technicians—assure Ethyl's customers of high product quality.



DIVISIONS AND SUBSIDIARIES

PETROLEUM CHEMICALS

Headquarters: New York

The Petroleum Chemicals Division is responsible for all activities in the United States related to the marketing of chemical additives for petroleum products and the use of these products by oil refiners, distributors and jobbers. The additives are manufactured at Ethyl plants at Baton Rouge, La.; Houston, Texas; and Orangeburg, S.C., and are shipped to customers in tank cars, tank trucks and drums. The Division includes headquarters and field staffs and the following groups: Marketing Research and Analysis, Product Service and Safety, Gasoline Testing, Refinery Technology, Products Application and Technical Service. The Division maintains regional and district offices and representatives in a number of cities throughout the country, and technical staffs at the Company's laboratories in Detroit, and operates five gasoline testing laboratories. Petroleum Chemicals personnel work closely with refiners, helping them select the "Ethyl" product best suited to their individual requirements and assisting them in achieving maximum effective results. They tailor the services of the Division's and the Company's various groups to meet the needs of each customer company.

Products — Gasoline Antiknock Compounds/Gasoline Ignition Control Compounds/Antioxidants/Gasoline Detergent-Deicer-Corrosion Inhibitors/Diesel Fuel Detergent-Dispersant-Corrosion Inhibitor/Diesel Fuel Ignition Improver/Fuel Oil Combustion Improver/Furnace Oil Stabilizer/Lubricating Oil Additives/Metal Deactivator/Oil Soluble Dyes

INDUSTRIAL CHEMICALS

Headquarters: New York

The Industrial Chemicals Division is responsible for all activities in the United States related to the marketing and use of "Ethyl" chemicals other than petroleum additives. These chemicals—basic and specialized—are used in a variety of chemical, plastic, industrial, agricultural, household, national defense and other products. They are manufactured at Ethyl plants at Baton Rouge, La.; Houston, Texas; and Orangeburg, S. C., and are shipped to customers in tank cars, tank trucks, barges, drums and special shipping containers. An important addition to the Industrial Chemicals Division's products will be the synthetic primary alcohols for detergents and plastics to be manufactured in a new plant now under construction at the Houston manufacturing center. This plant is expected to be in production this summer. Representatives of the Industrial Chemicals Division work closely with customers and potential customers in developing new markets for "Ethyl" products and providing technical advice in their effective utilization.

Products — Vinyl Chloride/Vinylidene Chloride/Ethyl Chloride/Ethylene Dichloride/Methyl Chloride/Chlorinated Solvents (Perchloroethylene, Trichloroethylene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane)/Caustic Soda/Sodium/Aluminum Alkyl Compounds/Orthoalkylated Chemicals/Orthoalkylated Antioxidants/Hydropolymer Oil/Synthetic Primary Alcohols (mid-1965)

ALBEMARLE PAPER MANUFACTURING COMPANY (Paper Division)

Headquarters: Richmond, Va.

Albemarle Paper Manufacturing Company is a wholly-owned subsidiary engaged in the research, manufacture and sale of pulp, paper and converted paper products. Albemarle owns or holds under long-term lease more than 200,000 acres of woodlands in Virginia and North Carolina, which supply part of its pulpwood requirements. Albemarle manufactures unbleached sulfate pulp, kraft paper and paper board at its mill at Roanoke Rapids, N. C., and kraft paper and a variety of blotting, absorbent, saturated, filter and other specialty papers in several plants at Richmond, Va. The Company's paper converting divisions include: Raymond Bag Company, which manufactures multiwall shipping sacks at Middletown, Ohio, and Richmond, Va.; Albemarle Container Company, which fabricates corrugated boxes at Odenton, Md., and Richmond, Va.; and Interstate Bag Company, which produces handle shopping bags at Walden, N. Y. The Albemarle organization has sales offices, sales representatives and agents throughout the United States and sells products in the export market.

Products — Unbleached Sulfate Pulp/Kraft Liner Board/Kraft Wrapping Paper/Colored Kraft/Bag and Sack Kraft/Specialty Kraft Papers/Blotting Paper/Gasket Paper/Filter Papers/Asphalt, Wax, Resin and Silicone Treated Papers/Coated Paper Board/Multiwall Bags/Plastic Film Bags/Handle Shopping Bags/Corrugated Containers



PLASTICS

Headquarters: Baton Rouge, La.

The Plastics Division is responsible for the VisQueen Division, which manufactures and sells "VisQueen" polyethylene and polyvinyl chloride film and polyvinyl chloride pipe, and markets "VisQueen" PVC panels, and the Polymers Division, which coordinates the research and production and will market the polyvinyl chloride resins and compounds to be produced in new facilities at the Ethyl manufacturing center at Baton Rouge, La. It also is responsible for the Company's 50 percent interest in Vypak Corporation, manufacturer and marketer of blow-molded polyvinyl chloride containers. "VisQueen" film for packaging, building and agricultural applications is manufactured in plants at Terre Haute, Ind., Flemington, N. J.; and Fremont, Calif.; and PVC pipe and conduit are made at Terre Haute. A fourth "VisQueen" film plant is under construction at LaGrange, Ga. Vypak makes polyvinyl chloride containers at Baltimore and has a new plant for expanded production under construction at Rockaway, N. J. "VisQueen" film and PVC pipe products and panels are sold by the nationwide VisQueen sales organization which has representatives throughout the country. The Plastics Division continues to evaluate new opportunities for the Company in the fast-growing plastics field.

Products — Polyethylene Packaging Films/Polyvinyl Chloride Packaging Films/Polyethylene Building and Agricultural Films/Polypropylene Netting/Polyethylene Tape/"VisKlamps"/Polyvinyl Chloride Pipe, Conduit and Fittings/Polyvinyl Chloride Panels/Polyvinyl Chloride (Vypak) Containers/Polyvinyl Chloride Resins and Compounds

ETHYL INTERNATIONAL

Headquarters: New York and Baton Rouge, La.

The Ethyl International Division is responsible for the manufacture, sale, distribution and service of the Company's products, and in developing new opportunities for the Company overseas. It directs all Company activities outside of the United States, except in Canada, where Ethyl Corporation of Canada Limited operates. The Ethyl International Division includes Ethyl S.A., sales, distribution and service subsidiary headquartered in Brussels, Belgium, which covers Europe, Africa and the Near East, and Ethyl Interamerica Corporation, which has similar responsibilities in Latin America. Ethyl International representatives handle the Company's business in the Far East. The new storage and shipping terminal at Dordrecht, Holland, five bulk terminals in the Caribbean area of Latin America, and Chemical Trader and EID, the two Ethyl tankers for bulk transportation of antiknock compounds, are operated by the division. The new antiknock compound and vinyl chloride manufacturing plant in Thessaloniki, Greece, is being built and will be operated by the division.

Products — Petroleum Additives/Industrial Chemicals/Paper Products/Plastics Products

ETHYL CORPORATION OF CANADA LIMITED (Canadian Division)

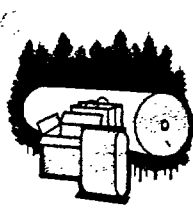
Headquarters: Toronto, Ontario

Ethyl Corporation of Canada Limited is a wholly-owned subsidiary, handling the manufacture, sale and service of "Ethyl" petroleum chemicals and industrial chemicals in Canada. Ethyl of Canada's manufacturing plant is located in Sarnia, Ontario. Its marketing organization consists of a Petroleum Additives department, which works closely with oil refiners, supplying products and services adapted to their needs, and a Chemical Products department, which provides technical support, handles industrial chemical sales, explores new market possibilities, and provides technical coordination with Ethyl Corporation in the United States. Ethyl of Canada representatives are strategically located near major oil refining and industrial centers to provide prompt, efficient service to customers and potential customers.

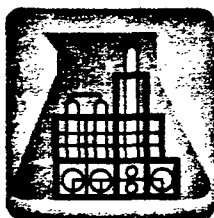
Products — Petroleum Additives/Industrial Chemicals



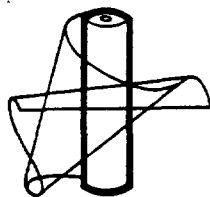
PETROLEUM CHEMICALS



PAPER



INDUSTRIAL CHEMICALS



PLASTICS

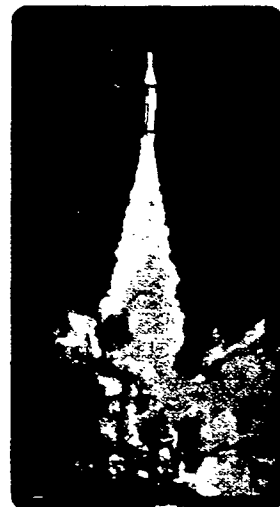
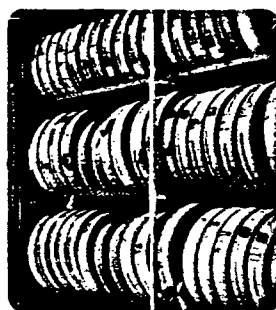
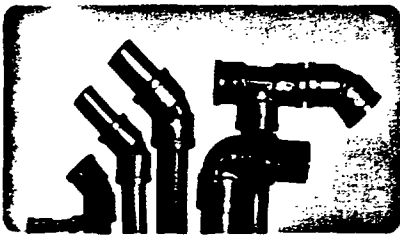
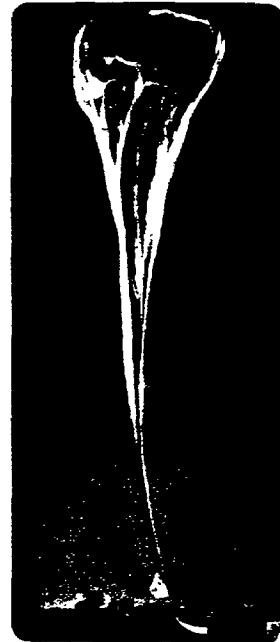
ETHYL'S PRODUCTS IN USE

A diversified—and further diversifying—company, Ethyl is a leading producer of a wide variety of chemicals, paper and plastics. Ethyl's products range from such basic and specialty materials as complex antiknock compounds, aluminum alkyls, caustic soda and vinyl chloride monomer to modern packaging films and handy, popular shopping bags.

While the Company's products play vital roles in industry, agriculture, commerce, transportation, national defense and the home—and some are seen and handled every day—others are rarely, if ever, visible to the millions of people who benefit from them. This is especially true of Ethyl's chemicals, which are used in processing and as catalysts, primary ingredients, intermediates or additives in the production of finished products.

The photographs on these pages, color keyed to the above symbols of the Company divisions involved, show a few of the finished products made by Ethyl and its subsidiaries and indicate some of the scores of applications in which other Company products are involved.





OPERATIONS REVIEW

Petroleum Chemicals

Paced by a strongly increased demand for gasoline, total domestic consumption of petroleum products in the United States rose substantially during 1964. As a result, the market for antiknock compounds and other petroleum additives continued to grow and Ethyl's sales of these products increased over 1963.

Increases in the selling price of antiknock compounds containing tetraethyl lead, early in 1964 and 1965, offset a substantial portion of increases in the cost of metallic lead, one of the principal raw materials for the products.

Refiners continue to show increasing interest in new antiknock compounds with reduced halogen contents, in antiknocks of increasingly complex formulations and in special combinations of anti-

knocks and other additives. With its extensive research and manufacturing facilities and know-how, Ethyl is a leader in developing, evaluating, recommending and supplying new antiknocks and antiknock-additive combinations of maximum cost-effectiveness. However, these developments increase the complexity of selling petroleum chemicals and providing related services.

There also is growing interest on the part of refiners in increasing the efficiency of gasoline blending operations at refineries. In this connection, Ethyl-developed systems for the automatic, in-line blending of gasoline components, antiknock compounds and other additives, and for monitoring and/or controlling the quality of gasoline blends, are meeting with excellent response.

The threat of rail strikes at several times during the year resulted in heavy pre-ordering by a number of customers. Adequate inventories maintained by the Manufacturing Department, and the Company's efficient delivery services and equipment, make it possible to fill large orders promptly and assure customers of uninterrupted operations.

Consumption of gasoline and other petroleum products is expected to increase in 1965. Despite increasing competition, a strong sales position for "Ethyl" petroleum chemicals is anticipated.

Industrial Chemicals

The overall sales trend for "Ethyl" industrial chemicals in 1964 was strongly upward, with demand exceeding the capacity of production facilities in some cases. There were particularly strong increases in sales of vinyl chloride monomer and vinylidene chloride monomer, which are intermediates for the production of polyvinyl chloride and

Ethyl-developed systems for monitoring and controlling gasoline blending are an important new Petroleum Chemicals service for customer oil refiners.





Imaginative research, conducted by capable staffs in modern, well-equipped laboratories, plays a key role in the Company's expansion and diversification.

polyvinylidene chloride, two widely used plastics. The Company's facilities for the manufacture of these intermediates were increased somewhat during the year and further extensive expansion of these and related facilities is now in progress to supply the growing markets.

Drawing on its extensive research and manufacturing background in chlorinated hydrocarbons, the Company successfully entered the chlorinated solvents business early in the year, marketing 1,1,1-trichloroethane, perchlorethylene and trichlorethylene. These products are used in dry cleaning, industrial degreasing and metal finishing. A plant for producing 1,1,1-trichloroethane was built at the Baton Rouge manufacturing center during the year and is now in operation. It is anticipated that facilities to produce the other solvents will be added in the near future.

One of the Company's major expansion and diversification projects is the unique new synthetic primary alcohols plant now nearing completion at the Houston manufacturing center. This plant, which was made possible by outstanding Ethyl

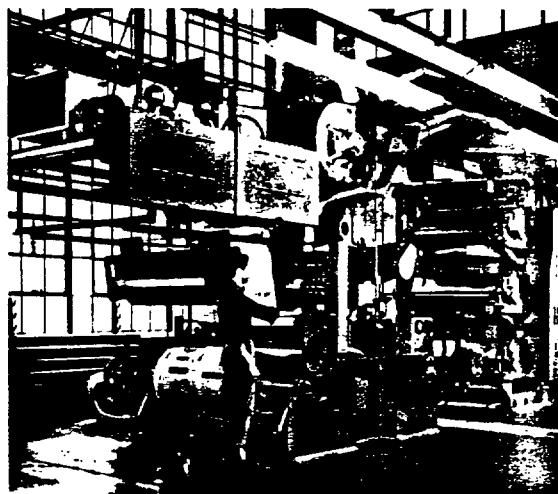
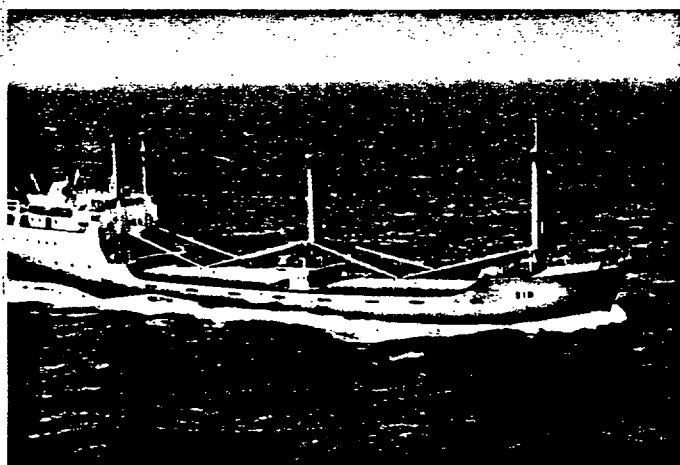
research and engineering developments, is expected to go into production about the middle of 1965. Initial products will be alcohols for use in biodegradable detergents and plasticizers for plastics, but the technology also suggests several potential new chemicals.

The marketing of products from this new facility is expected to contribute significantly to sales in 1965. Meanwhile, with demand for some products continuing to grow and demand for others remaining strong, it is anticipated that total sales of industrial chemicals will increase substantially.

Paper

With demand strong throughout 1964, Albemarle's paper-making machines ran at capacity rates and record amounts of kraft paper and kraft liner-board were produced. At the same time, however, prices continued at depressed levels most of the year. It now appears that price increases are developing and that the upward trend will continue.

In manufacturing operations, increased efficiency



Above Left: Ethyl's "VisQueen" plastic films, shipped to customers throughout the country, are widely used in packaging, building, agriculture and around the home.

Above: A new, six-color press and related equipment at the Middletown, Ohio, plant of the Raymond Bag division of Albemarle Paper Manufacturing Company produce attractive plastic bags and multiwall sacks.

Left: The EID, a second tanker for bulk overseas chemicals shipments, went into service during the year.

and improved processes and equipment contributed to even better product quality. A number of new kraft specialty products were introduced and decorative and functional coatings are now being produced in commercial quantities.

Construction of the new power plant at the Roanoke Rapids, N.C., mill is progressing and this important new facility is expected to be in operation by the end of 1965. Other modernization and expansion projects at Roanoke Rapids and at plants in Richmond, Va., are expected to increase efficiency and further improve product quality.

In a related move, it was announced during the

year that the Brown's Island mill in Richmond would be closed early in 1966. It is expected that an equivalent tonnage of paper now made at Brown's Island will be produced in expanded facilities at Roanoke Rapids.

Converted paper products—handle shopping bags, multiwall sacks and corrugated containers—accounted for increasing amounts of Albemarle paper production.

Demand for shopping bags was very strong and the Interstate Bag Division did the largest volume of business in its history. Its highly attractive and utilitarian products are sold throughout the coun-

try and in many other parts of the world. New shopping bag production equipment was added during the year and further expansion is planned.

The Albemarle Container Division experienced moderate growth, highlighted by the installation of modern, high-speed equipment for the production of corrugated boxes at the Odenton, Md., plant. At the Richmond plant, changes and improvements, which are continuing into 1965, were put into effect to increase productivity and profitability. The name of the Richmond unit was changed to Albemarle to provide a consistent marketing image, and it is planned to have any future facilities use the same name. The division looks forward to expansion of plant and production facilities to meet increased demand in the year ahead.

The Raymond Bag Division was affected by substantial declines in multiwall bag prices and by a 30-day strike during the year, but good progress was made in improving operations, adding new equipment, developing new products and further strengthening the organization. The installation of a new six-color press and related equipment enhanced the division's ability to produce attractive, color-printed paper bags and also to make plastic bags. Plans are under way for important realignments of equipment at the Middletown, Ohio, and Richmond, Va., plants to increase efficiency and broaden the product line. Increases in sales volume are anticipated in 1965.

The Wood Department continued to increase the mechanization of pulpwood harvesting, the mechanization and consolidation of woodyards, and the amount of pulpwood purchased by weight and delivered by truck. These measures improved efficiency and reduced raw material procurement costs. The forestry program was expanded during the year and the volume of pine pulpwood harvested on Company woodlands continues to increase. It is anticipated that the forest management program will eventually provide over 400,000 cords of pine pulpwood from Company lands annually.

Plastics

Plant expansion, new products, new organization and increased sales highlighted the activities of the Plastics Division during 1964.

The VisQueen Division maintained Ethyl's position as the world's leading producer of polyethylene film. VisQueen sales increased substantially, due in part to new and improved products and services. New products included multilayer films with improved optical and stiffness properties, polyvinyl chloride films and other new special-purpose films for packaging; improved films for protecting automobiles during production and delivery; new perforated tubing and sheeting for dry cleaners' garment bags; ultraviolet-resistant film for greenhouses; specialized films for high-altitude balloons; polypropylene netting; and "VisQueen" PVC panels.

The capacity of the three existing film plants was enlarged to meet increasing demand, and a cost improvement program was continued. Additional warehouses were added at four locations throughout the country to provide better delivery service to customers. In addition, plans for a new film plant at LaGrange, Ga., to supply the large and growing Southern market, have been announced. The plant is expected to be in production by the end of 1965.

Acquisition of the assets of the Plastic Products Division of Texacon Industries provided a base for entering the plastic pipe business. The operations were added to the VisQueen Division and were moved to the film plant at Terre Haute, Ind., where they have been substantially enlarged. The Pipe Products group now offers a complete line of polyvinyl chloride pipe and fittings. These materials have a number of weight, durability and handling advantages and their increased use for irrigation systems, electrical conduit, gas transmission lines, oil field applications and in drain, waste and vent uses in building construction is anticipated.

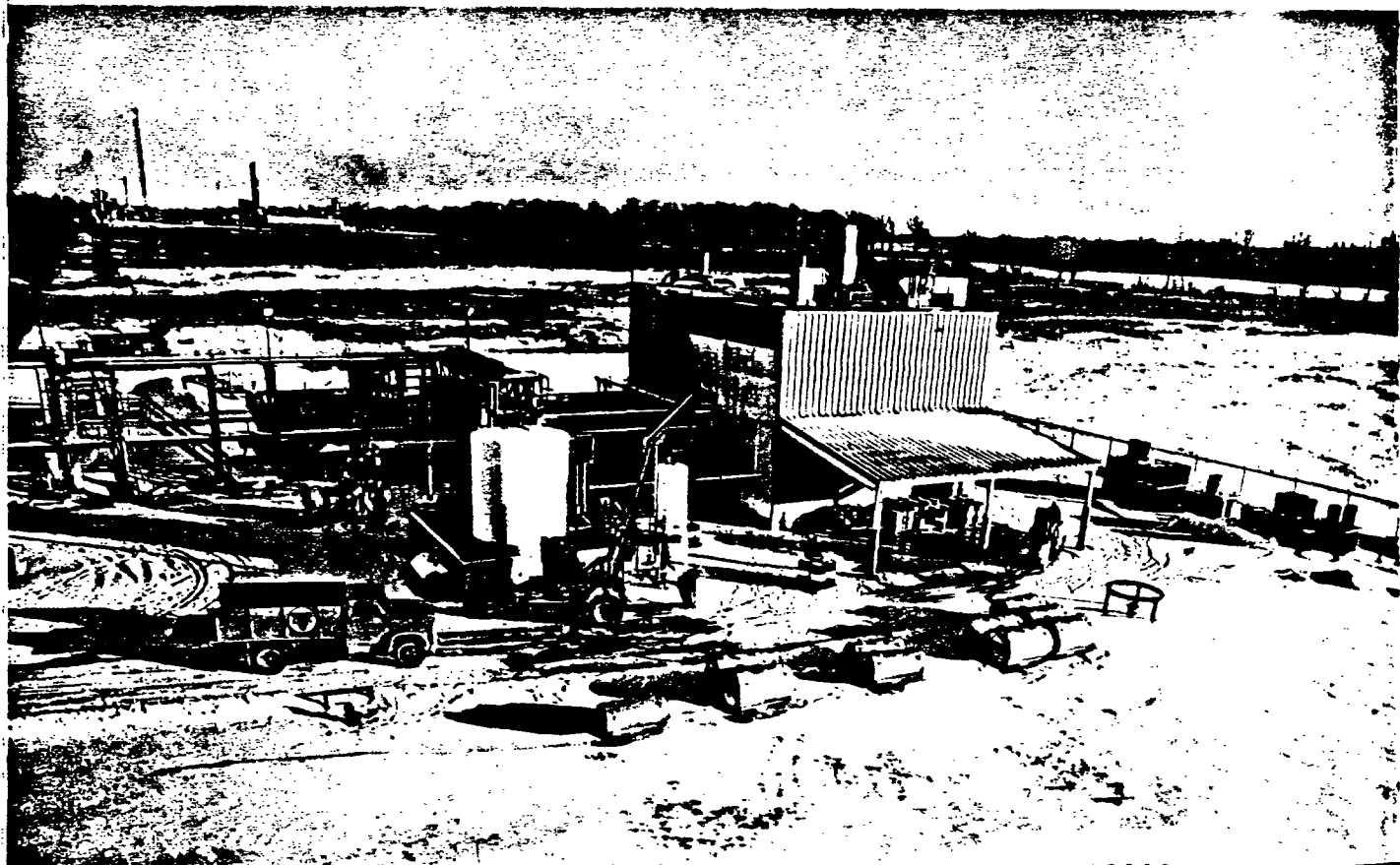
The Polymers Division was formed within the Plastics Division to coordinate the research and production and handle the marketing of polymers. The first of these polymers are the polyvinyl chloride resins and compounds that will be produced in a new plant at Baton Rouge. The plant—scheduled to go on stream about the middle of 1965—will be operated by the Manufacturing Department. Resins and compounds will be sold to manufacturers of upholstery material, floor coverings, handbags, raincoats, electric wire and cable insulation, phonograph records, pipe, and other PVC products.

Together with Solvay et Cie of Belgium, Ethyl

formed Vypak Corporation, a jointly-owned company, to produce and sell blow-molded plastic products. A new plant is underway at Rockaway, N. J., where manufacturing, research and engineering, and management functions will be located. Initial Vypak products are PVC bottles for shampoos, detergents, mouthwashes, drugs, cosmetics, waxes and other products.

With demand for existing products continuing to increase, with new manufacturing facilities going into production and new products becoming available during the year, the Plastics Division anticipates increased sales in 1965.

Facilities for producing industrial chemicals and additional petroleum additives have been added to the Ethyl of Canada manufacturing plant at Sarnia, Ontario.



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Canada

Ethyl Corporation of Canada Limited added new manufacturing facilities, strengthened its sales and market research and development organization, and increased sales during 1964.

Sales of antiknock compounds were higher than in 1963—and 1963 had been an exceptionally good year. The dollar volume of all products—antiknock compounds and other petroleum and industrial chemicals—also showed an increase.

A new industrial chemicals unit was built and put into operation at the manufacturing plant at Sarnia, Ontario. This unit produces gasoline additives, including antioxidants and detergent-deicer-anticorrosion products, as well as aluminum alkyls. The latter are used as catalysts by manufacturers of synthetic rubber and plastics.

Antiknock manufacturing facilities are being expanded to include production of tetramethyl lead and mixed lead alkyls, newer compounds which are coming into more widespread use by oil refiners. The new facilities are scheduled to go into operation in June.

A new Chemical Products department was formed to handle the sale of industrial chemicals, to investigate and promote new market possibilities and products, and to supply technical support to the Petroleum Additives department.

In 1965, automobile and gasoline sales in Canada are expected to increase substantially, expanding the market for petroleum additives. While the construction of a new plant by another antiknock compound manufacturer is expected to increase competition, Ethyl of Canada anticipates continued good sales.

International

The year 1964 was one of continued organization and staffing, growth, new construction, increased sales and further planning for the Ethyl Interna-

tional Division. Good progress was made in all of these areas.

Sales of antiknock compounds, other petroleum additives and industrial chemicals increased substantially, as Ethyl and its products and services were successfully presented to customers and potential customers overseas.

Ethyl S. A., the new sales, service and distribution subsidiary which covers Europe, the Middle East and Africa, was organized, with headquarters in Brussels, Belgium. A new storage and shipping terminal was built and put into operation at Dordrecht, Holland, and a distribution system, including tank cars and tank trucks, was established. Two more terminals are under construction in Europe and others are under study. The M/V EID, a second, larger tanker for bulk shipment of antiknock compounds, was put into service.

A royal decree was obtained from the government of Greece granting the Company permission to build a plant to manufacture antiknock compounds, vinyl chloride monomer and related chemicals at Thessaloniki. The plant is slated to be in production late in 1966.

In the Caribbean-Latin American area, another new terminal was opened during the year. This brings to five the number of installations in that area equipped to receive bulk shipments of antiknock compounds, increasing efficiency for customer oil refiners.

Other new terminals and several new business ventures are under study in various overseas areas.

Increased sales of antiknock compounds and other "Ethyl" chemicals in overseas markets are anticipated in 1965.

Research and Development

As a company committed to growth in the competitive chemicals, plastics and paper industries, Ethyl recognizes the importance of productive re-

search. Consequently, an active research and development program, which concentrates on Ethyl products of the present and future, is aggressively pursued. This program, which involves annual expenditures equal to about four percent of sales, has continued to make significant contributions to the Company's growth and diversification in the last year.

In support of present products, varied activities were carried forward to improve manufacturing processes and thus enhance the Company's competitive position; to find new applications for the products; and to help customers make best use of "Ethyl" products from a cost-effectiveness standpoint. In the latter connection, for example, extensive vehicle tests were carried out on antiknock fluids with various scavenger proportions in 1964. The results of this work were highly interesting to customer oil refiners.

Also in the area of petroleum chemicals application and use: After thorough evaluation, the Ethyl-developed catalyst designed to remove potential smog-forming materials from automobile exhaust gases was formally recognized as meeting the standards of the California Motor Vehicle Pollution Control Board. Research centered on developing devices to complement the engine modifications being built into 1966-model cars by the automobile industry is continuing.

Ethyl research helped develop processes and designs for new manufacturing facilities and for the production and marketing of new products. Some of the new facilities now under construction, or planned, include the synthetic primary alcohols plant at Houston, the polyvinyl chloride resins and compounds plant and the oxychlorination plant at Baton Rouge, and the new plant for the manufacture of antiknocks, vinyl chloride monomer and related chemicals in Greece.

In paper research and development, sources of fibrous raw materials with potentially improved

economy and greater strength have been identified. The production of decorative and functional coatings has progressed from pilot plant to sustained commercial operation. A number of new kraft paper specialties have been introduced and new automotive and diesel locomotive filter papers have been introduced. Several new concepts in multiwall bag packaging have been proven in the laboratory and are undergoing market studies.

The Company also carries out contract research for government agencies—especially the Department of Defense. This research includes missile fuels and special weapons. The Research and Development Department continued to supply, on a production basis, significant quantities of special chemicals for use in these areas.

During the year, the Company received about 90 domestic and 75 foreign patents. Ethyl now holds more than 900 unexpired U.S. patents and maintains over 600 abroad.

The Company's laboratories are continuing to work on the development of new and improved products in the following fields: petroleum additives, detergent chemicals, polymers, chlorinated solvents, polymerization catalysts, papers and converted paper products.

Employee and Public Relations

Ethyl takes pride in the good relations the Company and its divisions and subsidiaries enjoy with their employees and with the general public, and makes every effort to maintain and improve these relations.

At the year end, there were, throughout the entire Ethyl organization, 7,772 employees, of whom 3,034 were salaried and 4,738 were hourly paid. A majority of the production and maintenance employees and some clerical employees are represented by various unions under 12 bargaining agreements. Eleven agreements were signed during 1964 and three are scheduled to expire in 1965.

During the summer of 1964, members of Local 310, Pulp, Sulphite and Paper Mill Workers Union, AFL-CIO, voted a work stoppage at the Middletown, Ohio, plant of the Raymond Bag Company, multiwall bag division of Albemarle Paper Manufacturing Company. After a 30-day strike, the employees returned to work under a two-year agreement. Meanwhile, supervisory, technical and clerical employees maintained production at the plant and filled orders from customers, protecting Raymond's position in its highly competitive field.

At the annual meeting in May, shareholders ratified certain of the Company's employee benefit plans. Ethyl benefit plans and the wages and salaries paid by the Company during the year compare favorably with those prevailing in the areas and industries in which Ethyl and its divisions and subsidiaries operate.

In announcing the closing of the Brown's Island mill in Richmond, Va., effective early in 1966, Albemarle Paper Manufacturing Company stressed that it will make every effort to find jobs for displaced employees within the Company or with other employers. The Company stated that it would pay separation pay to terminated employees.

Floyd D. Gottwald, Ethyl's board chairman, was named "Management Man of the Year" by the National Management Association. He was chosen for the honor on the basis of executive and administrative leadership.

Throughout the year, Ethyl and its subsidiaries enjoyed good relations with the general public, the financial community, industry groups and in cities and towns where it maintains operations. As the Company continues to diversify and expand, it is more widely publicized, and its public relations become more important.

Expansion in plastics includes construction of a polyvinyl chloride resins and compounds plant at the manufacturing center at Baton Rouge, La.



CONSOLIDATED BALANCE SHEETS

ASSETS:	December 31	
	1964	1963
Current assets:		
Cash	\$ 15,191,756	\$ 12,937,345
Short-term securities	43,838,707	21,935,596
Accounts receivable	32,001,232	28,605,686
Inventories	32,867,755	30,995,005
Prepaid expenses	<u>1,241,054</u>	<u>1,341,503</u>
Total current assets	125,140,504	95,815,525
 Property, plant and equipment	 205,779,125	 189,481,921
Less, Accumulated depreciation and depletion	<u>47,297,773</u>	<u>33,923,428</u>
Net property, plant and equipment	158,481,352	155,558,493
 Investments in affiliated companies	 8,157,803	 7,270,439
 Deferred charges and other assets	 13,180,406	 13,565,519
 Patents, contracts and other intangibles	<u>11,877,952</u>	<u>13,270,101</u>
	<u>\$316,838,017</u>	<u>\$285,480,077</u>



LIABILITIES:	December 31	
	1964	1963
Current liabilities:		
Accounts payable and accrued expenses	\$ 22,001,358	\$ 16,094,794
Long-term debt, current portion	10,185,211	2,185,211
United States and foreign income taxes	13,238,943	10,198,119
Total current liabilities	45,425,512	28,478,124
Long-term debt	182,414,532	192,599,743
Deferred income taxes	6,208,473	5,284,203
Provision for employee benefits	6,687,730	6,969,706
	240,736,247	233,331,776
 STOCKHOLDERS' EQUITY:		
Capital stock:		
6% cumulative preferred, par \$100 per share	4,213,400	4,502,700
Class A common, par \$1 per share	149,036	447,108
Class B common, par \$1 per share	8,289,622	6,680,313
Capital surplus	20,861,554	15,955,149
Retained earnings	42,613,238	24,575,976
	76,126,850	52,161,246
Less, Preferred stock in treasury, 246 and 127 shares in the respective years (at cost)	25,080	12,945
Total stockholders' equity	76,101,770	52,148,301
	<u>\$316,838,017</u>	<u>\$285,480,077</u>

CONSOLIDATED STATEMENTS OF INCOME AND SURPLUS

STATEMENTS OF INCOME AND RETAINED EARNINGS

	Years Ended December 31	
	1964	1963
Income:		
Net sales	\$277,478,496	\$226,554,354
Miscellaneous income, net	2,951,885	2,154,701
	<u>280,430,381</u>	<u>228,709,055</u>
Costs and expenses:		
Cost of goods sold	190,859,901	154,791,015
Selling and general expenses	39,038,292	34,553,762
Interest and financing costs, long-term debt	11,793,815	12,246,198
United States and foreign income taxes	18,927,000	13,560,000
	<u>260,619,008</u>	<u>215,150,975</u>
Net income	19,811,373	13,558,080
Retained earnings at beginning of year	24,575,976	12,084,133
	<u>44,387,349</u>	<u>25,642,213</u>
Deduct, Cash dividends:		
Preferred stock, \$6.00 per share	259,658	276,540
Common stock, \$.20 per share in 1964 and \$.11 in 1963*	1,514,453	789,697
	<u>1,774,111</u>	<u>1,066,237</u>
Retained earnings at end of year	<u>\$ 42,613,238</u>	<u>\$ 24,575,976</u>

STATEMENTS OF CAPITAL SURPLUS

Balance at beginning of year	\$ 15,955,149	\$ 17,118,590
Excess of proceeds over par value of 1,228,200† shares of Class B common stock issued upon exercise of warrants	4,190,267	
Excess of cash received over par value of 83,037† and 3,249† shares of Class B common stock issued under stock option plan	720,339	27,761
Excess of cost over par value of preferred stock canceled	(4,201)	(3,840)
Increase in par value of common stock outstanding resulting from change in par value from \$5 to \$3 per share and issuance of one additional share of Class B common stock for each common share outstanding		(1,187,362)
Balance at end of year	<u>\$ 20,861,554</u>	<u>\$ 15,955,149</u>

*Adjusted for three-for-one stock split in December, 1964 and two-for-one stock split in May, 1963.

†Adjusted for three-for-one stock split in December, 1964.

The accompanying notes are an integral part of these statements.



NOTES TO FINANCIAL STATEMENTS

1. Acquisition:

Ethyl Corporation purchased the assets of the VisQueen polyethylene film business on November 30, 1963. Accordingly, the accompanying financial statements include the assets and liabilities of the acquired business and the results of its operations subsequent to the date of acquisition.

2. Inventories:

Inventories include:

	1964	1963
Finished goods	\$12,256,046	\$10,660,747
Raw materials and work in process	15,869,070	16,025,652
Stores, supplies, etc.	4,742,639	4,308,996
	<u>\$32,867,755</u>	<u>\$30,995,395</u>

Inventories are stated at the lower of cost or market, with cost being determined on the last-in, first-out basis with respect to approximately \$20,271,000 at December 31, 1964 and \$19,875,000 at December 31, 1963, and generally on an average cost basis with respect to the balance.

3. Investments in Affiliated Companies:

Investments in unconsolidated affiliates are stated at cost and represent the Company's investments in and advances to Ethyl-Dow Chemical Co. and Vypak Corporation, 50% owned companies, and Halifax Timber Company, a wholly-owned subsidiary. The Company's equity in the net assets of these affiliated companies at December 31, 1964 is approximately \$4,740,000. Dividends received approximated the Company's equity in the net income of these companies in 1964 and 1963.

4. Property, Plant and Equipment:

Property, plant and equipment is stated at cost, as follows:

	1964	1963
Land	\$ 11,315,705	\$ 11,134,097
Timberlands and standing timber	3,984,457	4,049,512
Buildings	29,930,890	28,715,033
Machinery and equipment	160,548,073	145,583,279
	<u>\$205,779,125</u>	<u>\$189,481,921</u>

5. Deferred Charges and Other Assets:

Deferred charges at December 31, 1964 consist principally of unamortized discount on long-term debt and other deferred financing expenses.

6. Patents, Contracts and Other Intangibles:

Patents and contracts with an unamortized cost basis of \$6,387,261 at December 31, 1964 are being amortized over their respective lives; other intangibles are stated at cost.

7. Long-Term Debt:

Reference is made to "Long-Term Debt" on page 10 of this report for information concerning the Company's borrowings.

8. Capital Stock:

The Class A common stock is the Company's voting stock. As of December 31, 1964, there are 156,000 shares authorized, of which 149,036 shares are outstanding.

The Class B common stock has no voting privileges, except as required by law. As of December 31, 1964, there are 12,000,000

NOTES TO FINANCIAL STATEMENTS *continued*

shares authorized, of which 8,289,622 shares are outstanding.

The 6% cumulative preferred stock is callable at \$101 and is entitled to annual sinking fund contributions of \$293,090. As of December 31, 1964, there are 100,000 shares authorized, of which 42,134 shares are outstanding (including 246 shares held in the Company's treasury).

A cumulative second preferred stock consisting of 500,000 shares, with par value of \$100 per share, has been authorized but none has been issued.

9. Warrants:

At December 31, 1964, there are outstanding warrants exercisable on or before December 1, 1982 which entitle the holders thereof to purchase 1,171,800 shares of unissued Class B common stock, \$1 par value, at \$4.58 per share. During 1964 warrants for 1,228,200 shares (adjusted for three-for-one stock split in December, 1964) were exercised.

10. Stock Option Plan:

Under the Company's restricted stock option plan, 900,000 shares of unissued Class B common stock were reserved for issuance to officers and other key employees. At December 31, 1963, there were outstanding options to purchase 853,800 shares at prices ranging from \$9.42 to \$24.00. During the year ended December 31, 1964, options for 83,037 shares were exercised and options for 67,053 shares were canceled, leaving outstanding at December 31, 1964 options covering 703,710 shares, of which options for 164,220 shares

are exercisable at that date. Above numbers and amounts have been adjusted for three-for-one stock split in December, 1964.

11. Restricted Payments:

The Company's note agreements contain restrictions, among others, against the payment of cash dividends. At December 31, 1964, \$14,700,000 of retained earnings is free of such restriction under the agreement presently most restrictive.

12. Depreciation, Depletion and Amortization:

Depreciation and depletion charged to income amounted to \$14,849,528 and \$13,196,918 in 1964 and 1963, respectively.

Amortization of intangibles and of deferred discount and financing expenses charged to income amounted to \$2,113,225 and \$1,934,260 in the respective periods.



AUDITORS' REPORT

To the Board of Directors and Shareholders
of Ethyl Corporation:

We have examined the consolidated balance sheet of Ethyl Corporation and Subsidiaries as of December 31, 1964, and the related statements of income and retained earnings and of capital surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We previously examined and reported upon the Company's consolidated financial statements for the year ended December 31, 1963.

In our opinion, the accompanying statements present fairly the consolidated financial position of Ethyl Corporation and Subsidiaries at December 31, 1964 and 1963, and the results of their operations for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

LYBRAND, ROSS BROS. & MONTGOMERY

New York, February 8, 1965.

TEN-YEAR PICTURE OF PROGRESS

	Years Ended December 31			
	1964	1963	1963 ⁽¹⁾	1962
Sales and Income				
Net sales ⁽²⁾	\$277,478,496	\$226,554,354	\$ 99,814,250	\$48,578,2
Income before non-cash items and income taxes	55,701,126	42,249,258	15,391,623	5,776,2
Depreciation, depletion and amortization	16,962,753	15,131,178	6,555,892	2,294,9
Income taxes, including deferred	18,927,000	13,560,000	4,455,000	1,719,
Net income	19,811,373	13,558,080	4,380,731	1,762,
Cash flow	37,698,396	30,388,016	12,117,007	4,211,
Financial Condition				
Working capital	\$ 79,714,992	\$ 67,337,401	\$ 63,000,811	\$10,313
Ratio of current assets to current liabilities	\$2.75 to \$1.00	\$3.36 to \$1.00	\$2.75 to \$1.00	\$3.29 to
Property, plant and equipment (Net)	158,481,352	155,558,493	150,959,130	29,221
Expenditures for property, plant and equipment	20,609,000	18,862,000	4,838,805	4,820
Long-term debt	182,414,532	192,599,743	196,375,319	15,522
Common Stock				
Number of shares outstanding	8,438,658	2,375,807	1,187,362	1.02
Net income per share ⁽³⁾	\$2.32	\$1.59	\$.63	
Income taxes per share ⁽³⁾	2.24	1.62	.89	
Book value per share ⁽⁴⁾	\$8.52	\$6.69	\$5.31 ⁽⁵⁾	

(1) Includes 4 months of combined paper and chemical operations.
All prior fiscal years represent paper operations only.

(2) Net sales are stated before deducting freight cost.



Fiscal Years Ended March 31

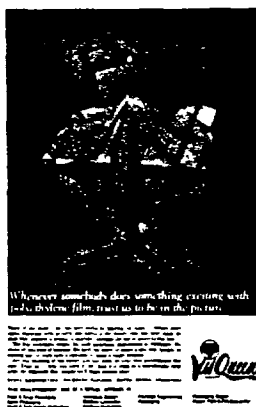
	1962	1961	1960	1959	1958	1957	1956
50	\$48,578,227	\$50,320,518	\$44,572,285	\$35,881,981	\$34,527,980	\$34,737,760	\$29,082,043
23	5,776,220	7,252,998	6,138,973	6,007,198	5,781,548	6,346,016	4,828,940
12	2,294,903	2,077,980	2,041,843	1,607,425	1,482,130	1,200,675	1,248,266
10	1,719,051	2,740,399	1,958,081	2,266,473	2,378,411	2,839,501	1,972,419
11	1,762,266	2,434,619	2,139,049	2,133,300	1,921,007	2,305,840	1,608,255
17	4,211,875	4,680,496	4,344,420	3,785,924	3,795,461	3,799,630	3,149,360
1	\$10,313,111	\$ 8,586,720	\$ 7,950,568	\$ 9,143,917	\$ 7,640,165	\$ 6,790,823	\$ 3,458,134
10	\$29 to \$1.00	\$2.73 to \$1.00	\$3.22 to \$1.00	\$3.91 to \$1.00	\$3.92 to \$1.00	\$2.73 to \$1.00	\$1.64 to \$1.00
0	29,221,972	28,336,492	27,742,696	24,512,702	20,015,076	18,231,910	13,821,610
15	4,820,189	2,644,359	5,291,737	6,099,122	2,957,526	5,557,245	3,009,303
9	15,522,300	13,092,000	13,178,500	13,793,100	8,700,000	9,109,043	5,248,392
2	1,029,674	976,956	971,803	760,992	699,761	621,020	542,880
3	\$.24	\$.35	\$.31	\$.32	\$.29	\$.40	\$.29
9	.28	.45	.32	.39	.41	.53	.40
1 ⁽⁶⁾	\$3.35	\$3.19	\$2.92	\$2.71	\$2.43	\$2.21	\$1.79

(3) Based on the average number of shares outstanding in each year, adjusted for stock splits and stock dividends, except for the years ended December 31, 1963 and 1964, which are based on the number of shares outstanding at the end of these years, with 1963 adjusted for the 3-for-1 stock split in December 1964 and 1,228,200 shares issued in 1964 upon exercise of warrants.

(4) Adjusted for stock splits and stock dividends.

(5) Includes addition to capital surplus of \$1.56 per share resulting from sale of warrants.

ADVERTISING AND SALES PROMOTION



A corporate advertising program, designed to present Ethyl Corporation as a dynamic, growing, diversified company, was started in June 1964. The full-page, full-color advertisements in the program appear regularly in widely read national magazines. They already are making progress in correcting the impression that "Ethyl" gasoline is the Ethyl Corporation and that Ethyl is a one-product company serving one industry.

Each advertisement features one of the many products in the Company's growing product line and enumerates many of the others that Ethyl and its divisions and subsidiaries supply to various industries.

In addition to informing the business community—and hence customers and potential customers—the corporate advertising program points out to the financial world, government agencies, potential employees and the general public that Ethyl is a progressive, research-minded company.

Like all of the Company's printed materials, the corporate advertisements carry the new, updated "Ethyl" trademark, which now serves all parts of the organization. Subsidiaries and divisions use the new trademark as a common denominator to identify themselves as members of the Ethyl complex and to further the concept of a diversified company.

The corporate advertising program is supplemented by a number of other advertising programs designed to sell the products and services of the various divisions. These advertisements appear in the leading industry and trade publications. "Ethyl" antiknock compounds, for example, are advertised in magazines widely read by oil refiners, marketers, engineers and research people. "VisQueen" polyethylene film is advertised in magazines reaching the many companies interested in packaging all kinds and types of products. Other petroleum chemicals, plastics, industrial chemicals and paper products are promoted in specialized trade publications reaching potential customers throughout the world.

Throughout the year, the Advertising and Sales Promotion department has created and produced a variety of printed materials, displays and visual aids for use by Company divisions in promoting "Ethyl" products and services.

As the Company continues to add new products, advertising and sales promotion will play an important part in gaining recognition for these products and promoting their sale.

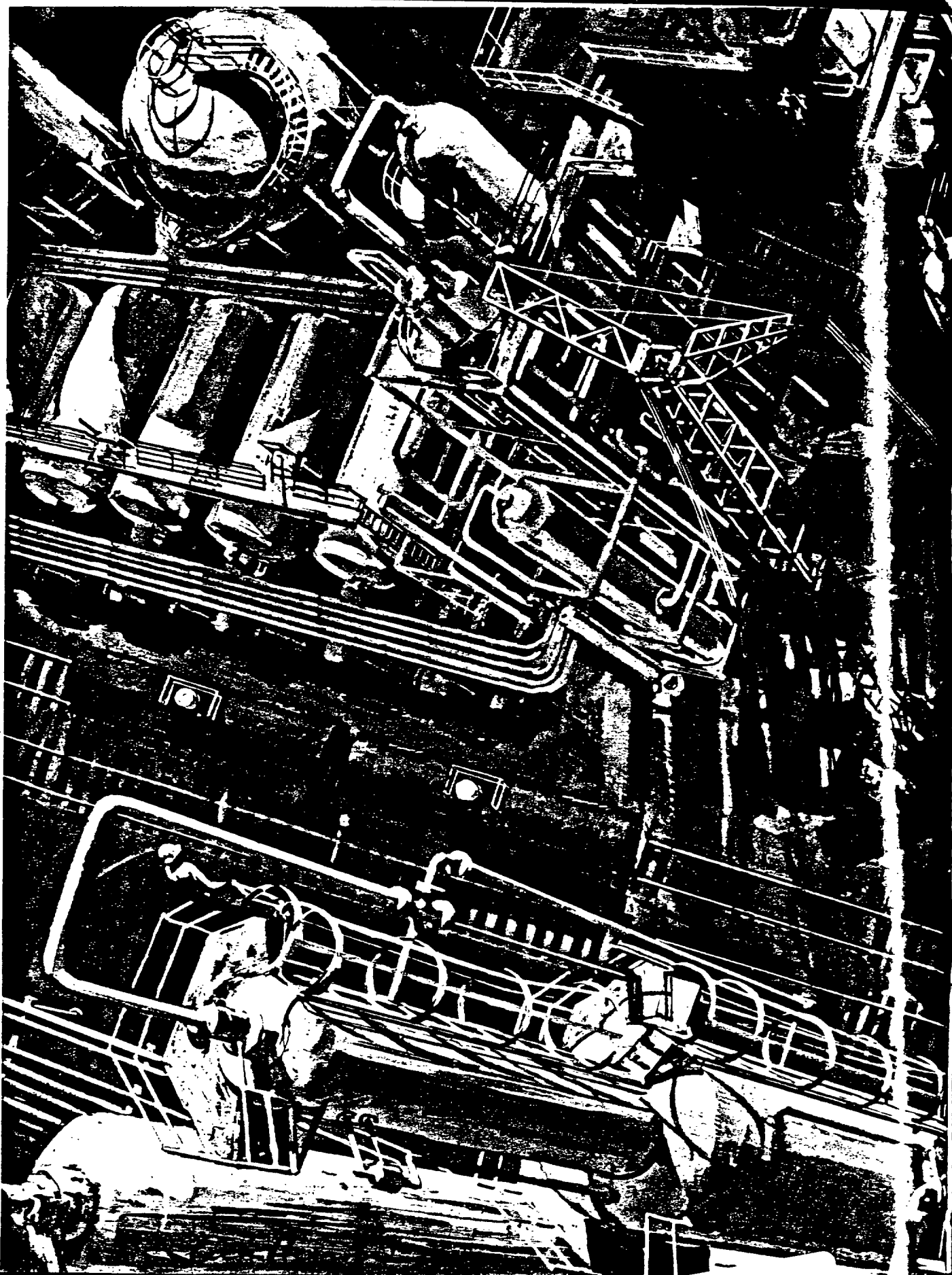


Who would think that the old-fashioned shopping bag would become a status symbol? Yet it has. Today, stores are set apart by their high-style, smart-looking shopping bags. Ethyl designs, makes and prints more shopping bags than anyone. We also make chemicals used in weather

research, others that preserve life in rubber, stop engines from knocking. Plastic films used to wrap phonograph records and socks for tots. These are some of the things we're doing today. Where will Ethyl products turn up next? Wherever research and our imagination take us.

ETHYL CORPORATION New York, N.Y. Petroleum Chemicals • Industrial Chemicals • VisQueen Plastics • Ethyl of Canada • Ethyl International • Albemarle Paper • Raymond Bag • Interstate Bag

ETC 16916



ETC 16917

ETHYL

ETC 16918

The cover of this annual report is lithographed on Albemarle cast coat, produced by Albemarle Paper Co.

The Year in Brief:

SALES INCREASE 10%, AND EARNINGS INCREASE 22%, FOR NEW RECORDS IN 1965.
 RECORD 1965 CAPITAL EXPENDITURES BRING THREE-YEAR TOTAL TO OVER \$91 MILLION.
 NEWLY COMPLETED PLANTS, AND OTHERS COMING ON STREAM, WILL BROADEN ETHYL'S OPERATIONS.
 ETHYL'S FOURTH POLYETHYLENE FILM PLANT GOES ON STREAM IN LAGRANGE, GA.
 NEW POLYVINYL CHLORIDE PLANT IN OPERATION AT BATON ROUGE.
 THREE NEW POLYVINYL CHLORIDE PLASTIC PRODUCTS INTRODUCED IN 1965.
 NEW FACILITIES AT ROANOKE RAPIDS, N. C. WILL GREATLY IMPROVE ETHYL'S PAPER OPERATIONS.
 SYNTHETIC ALCOHOLS PLANT COMPLETED—OTHER INDUSTRIAL CHEMICAL FACILITIES UNDERWAY.
 PETROLEUM CHEMICALS GROWTH AIDED BY RECORD OVERSEAS AND CANADIAN SALES.
 LONG-TERM DEBT REDUCED TO 64% OF TOTAL CAPITALIZATION AT END OF 1965.

Financial Highlights

	<i>Years Ended December 31</i>	
	1965	1964
Net Sales	\$305,011,163	\$277,478,496
Taxes on Income	17,047,000	18,927,000
Net Income	24,183,030	19,811,373
Cash Flow	44,106,269	37,698,396
Net Income Per Share of Common Stock	\$2.52 ⁽¹⁾	\$2.08 ⁽²⁾
Cash Dividends		
Preferred Stock	239,309	259,658
Common Stock	4,269,106	1,514,453
Earnings Retained in Business	19,674,615	18,037,262
Depreciation, Depletion and Amortization	18,666,955	16,962,753
Capital Expenditures	52,050,000	20,609,000
Total Assets	335,338,396	316,838,017
Working Capital	69,863,287	83,182,403
Book Value per Share of Common Stock	\$10.21	\$8.52

(1) Based on 9,487,380 shares outstanding at December 31, 1965.

(2) Based on 8,438,658 shares outstanding at December 31, 1964 adjusted for 963,000 shares issued in 1965 upon exercise of warrants.

ethyl corporation / 1965 annual report

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Annual Meeting

The annual meeting of Ethyl Corporation shareholders will be held at the Company's executive offices in Richmond, Va., on Thursday, April 21, 1966.

Stock Transfer Agents

First and Merchants National Bank, Richmond, Va.
Chase Manhattan Bank, New York, N.Y.

Registrars Of Stock

The Bank of Virginia, Richmond, Va.
Morgan Guaranty Trust Co., New York, N.Y.

General Counsel

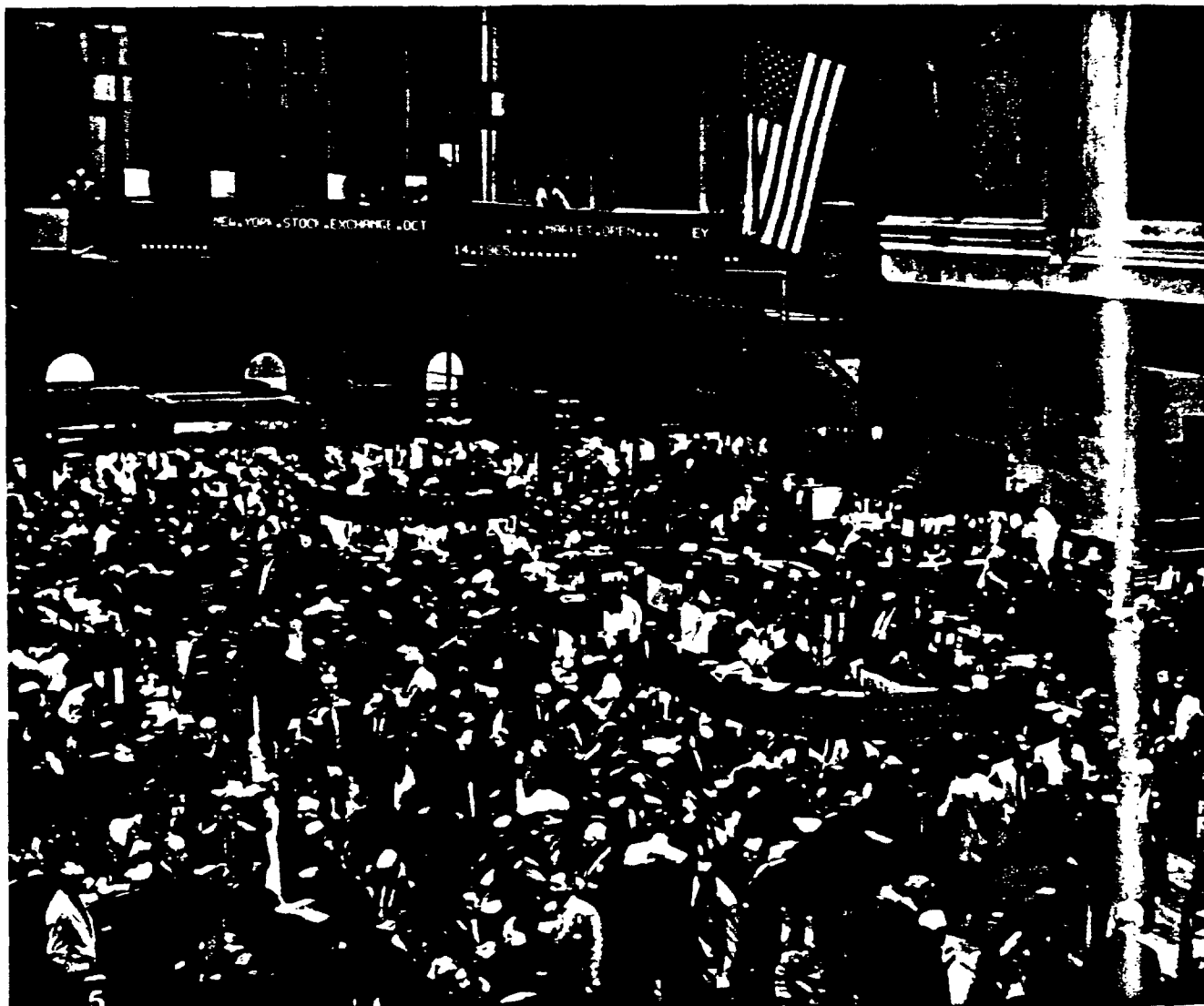
Hunton, Williams, Gay, Powell & Gibson, Richmond, Va.

Executive Offices

330 South Fourth Street, Richmond, Va. 23219
100 Park Avenue, New York, N.Y. 10017
Louisiana National Bank Building, Baton Rouge, La. 70821

message to shareholders

Ethyl Corporation's common stock, with the ticker symbol EY, was admitted to trading on the New York and Pacific Coast stock exchanges on October 14, 1965. Below, the floor of the New York Stock Exchange as trading began in the Company's stock.





ethyl corporation
and
subsidiaries

To the Shareholders of Ethyl Corporation:

THE past year was one of broad growth and progress in many directions—in increases in sales and earnings, in the addition of new plants and improvements to existing facilities, in the introduction of new products and the applications of Ethyl research, and in diversification into new and promising fields.

In 1965, consolidated net sales for the Company and its subsidiaries increased 10% over 1964 to a level of \$305,011,163, and net income increased 22% to \$24,183,030. These results compared with consolidated net sales of \$277,478,496 and net income of \$19,811,373 for 1964. Net income in 1965 was equal to \$2.52 per share compared with \$2.08 a share in 1964 adjusted to a comparable basis.

*Sales up 10%,
earnings up 22% over 1964*

All major product lines—petroleum chemicals, industrial chemicals, paper and plastics—contributed to the over-all increase in sales, with the Company's industrial chemicals, paper and international operations accounting for the largest percentage gains. The growing effect of the Company's diversification is evident in the fact that sales of products other than petroleum chemicals were approximately two-thirds higher in 1965 than they were in 1963.

A major highlight of 1965's operations was an unprecedented program of capital expenditures for new plants and equipment. Capital expenditures in 1965 amounted to \$52.1 million, for a three-year total of more than \$91 million, and they were applied to the construction of new plants, to expansions of existing facilities, and to process and other improvements to increase efficiency and reduce operating costs.

*Capital expenditures in 1963-1965
exceeded \$91 million*

Among the new facilities completed in 1965 were the compounds portion of a polyvinyl chloride plant in Baton Rouge, a new polyethylene film plant—the Company's fourth—in LaGrange, Ga., and a synthetic primary alcohols plant in Houston. Moreover, the Company completed a new power plant at its Roanoke Rapids, N. C. paper mill, expanded its paper operations at other locations, and increased its participation in the industrial chemicals, plastics and petroleum chemicals fields.

*New plants completed
in 1965 broadened the
Company's operations*

This vigorous expansion is continuing in 1966. Currently, the Company is building an antiknock compound plant in Greece, and is proceeding with revisions to the Roanoke Rapids installation to enlarge its capacity. Meanwhile, it has completed the resins portion of its polyvinyl chloride plant at Baton Rouge, and is going forward with construction projects for industrial solvents, chlorinated hydrocarbons, and other industrial chemicals.

The construction projects completed in 1965 were subject to delays, in a number of instances, and thus contributed little to the Company's operations for the year. More-



Floyd D. Gottwald,
chairman of the board
of directors, and
Dr. George F. Kirby,
president of Ethyl
Corporation.

*Acquisition of aluminum
extruder planned in 1966*

Senior Note agreement revised

The question of air pollution

over, some of the highly complicated installations, such as the synthetic primary alcohols plant, must undergo an extensive period of start-up before reaching planned operating levels. Nevertheless, as the various construction and improvement projects are completed and hit their stride, we expect that they will begin to contribute to increased sales and earnings in 1966.

In a further diversification step, the Company has contracted to purchase all the common stock of The William L Bonnell Company, Inc., an aluminum extruder with headquarters in Newnan, Ga. The Bonnell transaction, scheduled for completion by mid-1966, involves purchase of 600,000 shares of Bonnell stock for approximately \$10.5 million. The Bonnell acquisition will give Ethyl an entry into aluminum fabrication.

The Company's cash flow increased from about \$38 million in 1964 to \$44.1 million in 1965. This was more than adequate to cover dividends and long-term debt payments totalling \$14.7 million in 1965, but covered only a portion of the year's large capital expenditures, resulting in a decline in working capital. Accordingly, the Company entered into an agreement as of December 31, 1965 with the holders of its 5¾% Senior Notes, whereby the Company's annual payments on these notes (originally scheduled at \$8 million annually) are deferred until 1971, when they will be replaced by new annual instalments of \$12 million. This will, in effect, make available to the Company a total of \$40 million over the next five years, which can be applied to increasing its working capital and financing further expansion. Other revisions of the Senior Note agreement will give the Company additional flexibility in planning its future growth. Details of this transaction are reported in the Financial Review of this report.

Following the approval of the common stockholders, the former A and B classes of the Company's common stock were reclassified in June 1965 into one class of common stock with general voting rights. In October 1965, the reclassified common stock of Ethyl was admitted to trading on the New York Stock Exchange and the Pacific Coast Stock Exchange, thus broadening the market for the Company's securities.

In connection with the continuing study of automobile exhaust as it relates to air pollution, questions were raised in 1965 as to whether lead antiknock compounds in gasoline contribute to air pollution or create a possible hazard to public health. Similar questions have been raised from time to time since antiknock compounds were first put into general commercial use.

On the basis of facts developed by scientific and medical investigations extending



ethyl corporation
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subsidiaries

back over forty years, the Company believes that lead antiknock compounds are not a significant factor in air pollution, do not contribute to the formation of photochemical smog, and do not pose a public health problem. Indeed, lead antiknock compounds have been among the most thoroughly studied groups of industrial products, from the standpoint of public health. Ethyl has sponsored much of this long-range research as a matter of company policy and in the public interest.

In January 1965, the U. S. Public Health Service published the results of a comprehensive survey of lead in the atmosphere of three representative cities—Los Angeles, Philadelphia and Cincinnati. Ethyl participated in carrying out this survey. The Public Health Service study confirmed the earlier research findings and showed that atmospheric lead levels are low and that the observed levels of lead in the human body are well within the accepted normal range.

The Public Health Service sponsored a scientific symposium on environmental lead in December 1965, at which the data and opinions on the subject were reviewed, and additional public inquiries into lead and other components of automobile exhaust are expected in 1966.

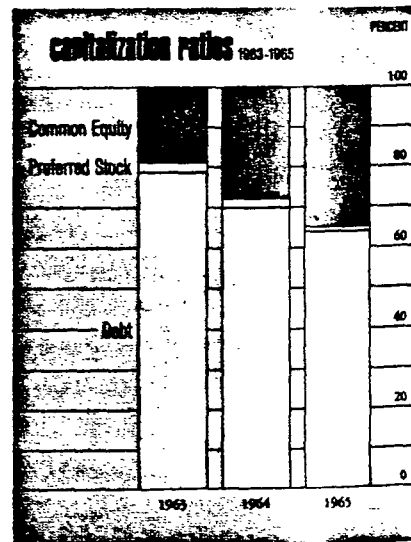
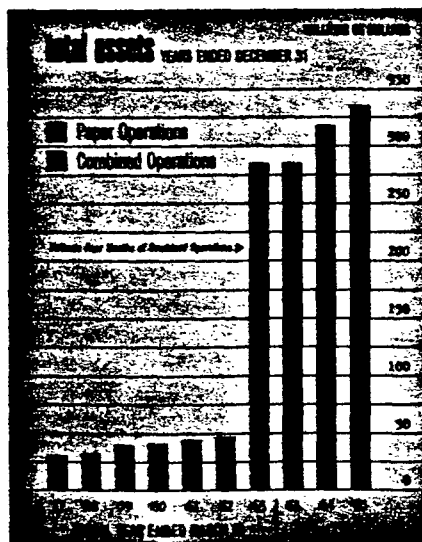
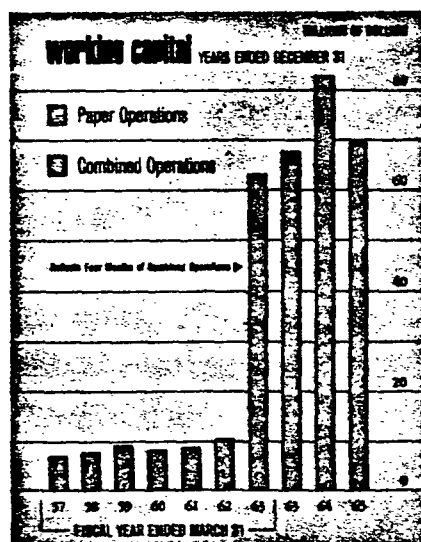
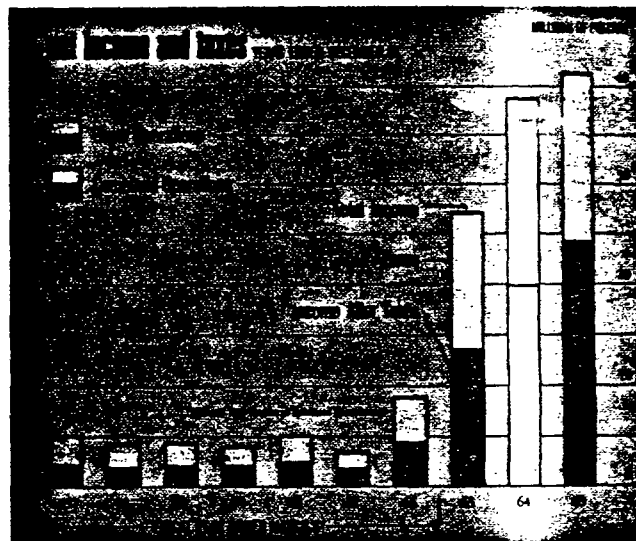
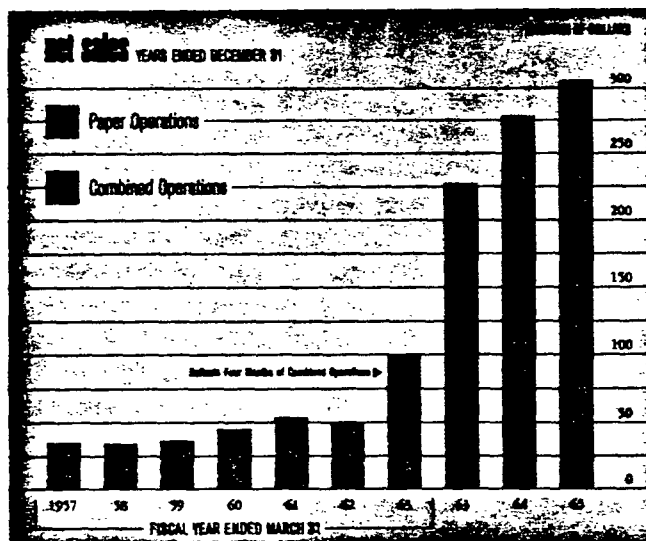
The Company intends to continue its own research program and to cooperate with other agencies in obtaining further reliable data in the field of air pollution. We are confident that such data will continue to confirm that lead in general, and antiknock compounds in particular, create no hazard to the public health.

At this time, we want to express our sincere appreciation to our employees, stockholders, customers and suppliers for their loyalty and support. We hope to continue to merit their confidence in 1966 and in all the years ahead.

GEORGE F. KIRBY
President

FLOYD D. GOTTWALD
Chairman of the Board

financial review



Sales and Net Income

CONSOLIDATED net sales and net income reached new high levels in 1965.

Sales in 1965 reached a level of \$305,011,163. These represented an increase of \$27,532,667, or 10 percent, over sales of \$277,478,496 in 1964.

Higher sales were achieved in all major product lines. Besides increases in volume, dollar sales in some instances were aided by price improvement during the year, notably in the paper industry. Conversely, weaknesses in polyethylene film prices were offset by a larger sales volume.

Petroleum chemicals accounted for the largest dollar increase in sales, followed by paper and industrial chemicals. The increase in petroleum chemicals is partly accounted for by substantial gains in sales by Ethyl of Canada and by the International Division, reflecting substantial progress by those divisions.

Sales by major product lines, together with their relative percentages of total sales, are shown in the table below.

Net income for 1965 increased to \$24,183,030, which was \$4,371,657, or 22 percent, higher than in 1964. The

higher net income reflected increased sales, improved prices in some fields, and increased efficiency and reduced operating costs in a number of directions as well as the lower federal income tax rate and an increased investment credit which largely offset plant start-up costs during the year. Net income in 1965 represented an 8% return on sales as compared with a 7% return on sales for 1964.

The 1965 net income was equal to \$2.52 a share on the 9,487,380 shares of common stock outstanding on December 31, 1965. It compares with net income of \$2.08 a share in 1964 on the basis of 8,438,658 shares outstanding on December 31, 1964 adjusted for the exercise of warrants for 963,000 shares during 1965.

In the course of placing its new plants into operation, the Company incurred start-up costs (including preliminary expense) of \$5,052,000. All but one of these plants are now fully on stream. An investment credit of \$2,350,000 was applied to a reduction of Federal income taxes. Since the investment credit is a direct effect on after-tax income, it almost entirely offset the effect of start-up costs

in the year. The investment credit was equal to 25 cents per share of common stock outstanding on December 31, 1965.

Interest costs in 1965 amounted to \$10,885,777, down slightly from the interest charges of \$11,055,029 in 1964.

Capital Stock and Dividends

THE former A and B classes of common stock were reclassified in June 1965 into one class of common stock with general voting rights. During the year, a total of 1,048,722 new shares of common stock were issued as the result of the exercise of warrants and of employee stock options. This brought the total number of common shares outstanding to 9,487,380 on December 31, 1965.

Also at the special meeting on June 22, 1965, the shareholders authorized the redemption of the Company's former Cumulative Preferred Stock and the redesignation of the Cumulative Second Preferred Stock as the Cumulative First Preferred Stock. Holders of the former Cumulative Preferred Stock were given the option of exchanging their shares, on a share-for-share basis, for shares of the new Cumulative First Preferred, designated 6% Series A, or of redeeming their shares at a price of \$101 per share plus accrued dividends. Holders of 38,036 shares of the former preferred stock elected to exchange their shares for an equal amount of the new Cumulative First Preferred Stock, and holders of 3,824 shares redeemed their shares for a total of \$391,582, including accrued dividends.

NET SALES BY PRODUCT LINES — 1963-1965 (in thousands of dollars)

	1965		1964		1963	
	Net Sales	Percentage of Total	Net Sales	Percentage of Total	Net Sales	Percentage of Total
Petroleum Chemicals	\$189,504	62%	\$173,001	62%	\$157,122	69%
Industrial Chemicals	29,855	10%	25,389	9%	18,309	8%
Plastics	29,955	10%	28,856	11%	2,211	1%
Paper and Paper Products	55,697	18%	50,232	18%	48,912	22%
	<u>\$305,011</u>	<u>100%</u>	<u>\$277,478</u>	<u>100%</u>	<u>\$226,554</u>	<u>100%</u>

The Company's stockholders, at the special meeting on June 22, 1965, also approved an increase to \$100 million from \$50 million in the amount of the new Cumulative First Preferred Stock authorized for issue.

Common stock dividends, which were at the quarterly rate of 8½ cents a share during the first two quarters, were increased 50% to a level of 12½ cents a share, beginning with the July 1 dividend. This brought total dividend payments to 41⅓ cents a share for the year. The Company's policy is to retain most of its net income to finance its growth and diversification program.

Source and Disposition of Funds and Changes in Working Capital

THE following table shows the source and disposition of funds for the year 1965:

Source of Funds	
Net Income	\$24,183,030
Depreciation, Depletion and Amortization	18,666,955
Deferred Income Taxes	1,256,284
Proceeds from the Exercise of Warrants and Employees' Stock Options	5,266,056
Decrease in Working Capital and Other Items	17,421,301
	\$66,793,626
Disposition of Funds	
Cash Dividends	\$ 4,508,415
Long-Term Debt Payments	10,235,211
Capital Expenditures	52,050,000
	\$66,793,626

Cash Flow (consisting of Net Income plus Depreciation, Depletion and Amortization and Deferred Income Taxes) increased from \$37,698,396 in 1964 to \$44,106,269 in 1965. This increased cash flow amply provided for cash dividends and long-term debt payments in 1965 totalling \$14,743,626. However, the applicable balance of cash flow covered only a portion of the Company's large capital expenditures during 1965. New funds of \$5,266,056, arising from the exercise of warrants and stock options during the year, and funds taken from working capital provided the balance of the year's capital expenditures.

At December 31, 1965, working capital was \$69,863,287, and the ratio of current assets to current liabilities was 2.93 to 1. This compared with working capital of \$83,182,403 and a ratio of current assets to current liabilities of 2.98 to 1 on December 31, 1964.

Capital Expenditures

DURING 1965, capital expenditures totaled \$52,050,000. This brought capital expenditures for the past three years to a total of \$91,521,000. Most of 1965's capital expenditures were for new plants and for expansions and modernizations of existing facilities in connection with the Company's overall program of expansion and diversification.

The major projects in the program, some of which were completed in 1965, are listed in the following table.

Project and Location	Completion Date
Synthetic Primary Alcohols Plant, Houston, Texas	Completed
Polyvinyl Chloride Resins and Compounds Plant, Baton Rouge, La.	Early 1966
Antiknock Compound and Chemicals Plant, Thessaloniki, Greece	Fall 1966
Power Plant, Roanoke Rapids, N.C.	Completed
Modernization and Expansion of Pulp and Paper Mill, Roanoke Rapids, N.C.	Early 1966
VisQueen Film Plant, LaGrange Ga.	Completed
Expansion of Vinyl Chloride Facilities, Houston, Texas	Completed
Baton Rouge, La.	Mid-1966
Perchloroethylene and Trichloroethylene Units, Baton Rouge, La.	Late 1966
Aluminum Extrusion Business Acquisition, Newnan, Ga.	Purchase to be completed by Mid-1966
Estimated Total Cost	\$68.8 Million

Long-Term Debt

DEBT repayments totalling \$10,235,211 were made during 1965. These consisted of payments of \$500,000 on the 5½% Bank Loan, due 1970; \$8,000,000 on the 5¾% Senior Notes, due 1978; \$685,211 on the 3⅜% Guaranteed Notes, due 1970; \$1,000,000 on the Subordinated Notes, due 1972 and \$50,000 on a subsidiary's debt.

Since the Ethyl-Albemarle merger in November 1962, a total of \$24,996,542 has been paid on long-term debt. As of December 31, 1965, the long-term portion of the debt stood at \$180,294,971, which was equal to 64 percent of the Company's total capitalization.

To increase its working capital, and

to make available funds for future expansion, the Company as of December 31, 1965 entered into a revised agreement with the holders of its 5¾% Senior Notes. Under a revision of the agreement, the Company's annual debt payments on these notes, due in 1966 through 1970, have been deferred until 1971. These payments were originally scheduled at a rate of \$8,000,000 annually from 1966 through 1970. Beginning in 1971, new annual instalments of \$12,000,000 will be applied against the \$106,000,000 in Senior Notes outstanding as of December 31, 1965.

This revision will have the effect of making available to the Company a total of \$40 million between 1966 and 1970, which can be used to increase its working capital and provide funds for further expansion. A second revision in the note agreement permits an increase in the Company's borrowing ability to \$50 million. This, too, will give the Company greater flexibility in financing its future growth.

The elements of the Company's long-term debt and the amounts falling due in future years are shown in the accompanying tables, "Summary of Long-Term Debt" and "Summary of Debt Maturities."

SUMMARY OF LONG-TERM DEBT

5½% Bank Loan—Due 1966-1970 The Chase Manhattan Bank	\$ 7,000,000
5¾% Senior Notes—Due 1971-1978 The Prudential Insurance Company of America The Equitable Life Assurance Society of the United States The Northwestern Mutual Life Insurance Company New York Life Insurance Company	106,000,000
3¾% Guaranteed Notes—Due 1966-1970 Three Canadian Banks (Owed by Canadian subsidiary and guaranteed by parent company)	3,429,532
5¾% Subordinated Notes—Due 1966-1972 The Prudential Insurance Company of America The Equitable Life Assurance Society of the United States New York Life Insurance Company	15,985,000
5¾% Subordinated Notes—Due 1979-1982 Privately Placed with Various Investors	50,000,000
Miscellaneous Debt Due 1966-1968	415,650
Total Debt at December 31, 1965	\$182,830,182
Current Portion of Debt	2,535,211
Long-Term Debt	\$180,294,971

SUMMARY OF DEBT MATURITIES

	5½% Bank Loan Due 1970	5¾% Senior Notes Due 1978	3¾% Guaranteed Notes Due 1970	5¾% Subordinated Notes Due 1972	Total Annual Amount
1966	\$ 750,000	—	\$685,211	\$1,000,000	\$ 2,535,211*
1967	750,000	—	685,211	2,500,000	4,035,211*
1968	1,250,000	—	685,211	2,500,000	4,535,211*
1969	1,250,000	—	685,211	2,500,000	4,550,861*
1970	3,000,000	—	688,688	2,500,000	6,188,688
1971	—	\$12,000,000	—	2,500,000	14,500,000
1972	—	12,000,000	—	2,485,000	14,485,000
1973-77	—	12,000,000	—	—	12,000,000
1978	—	22,000,000	—	—	22,000,000

* Includes miscellaneous debt payments of \$100,000 annually in 1966-1968 and \$115,650 in 1969.

5¾% Subordinated Notes Due 1982 are payable in the years 1979-1982.

operations review

Petroleum Chemicals

PRODUCTS: GASOLINE ANTIKNOCK COMPOUNDS / GASOLINE IGNITION CONTROL COMPOUNDS / ANTI-OXIDANTS / GASOLINE DETERGENT-DEICER-CORROSION INHIBITORS / DIESEL FUEL DETERGENT-DISPERSANT-CORROSION INHIBITOR / DIESEL FUEL IGNITION IMPROVER / FUEL OIL COMBUSTION IMPROVER / FURNACE OIL STABILIZER / LUBRICATING OIL ADDITIVES / METAL DEACTIVATOR / OIL SOLUBLE DYES

THE Petroleum Chemicals Division experienced another successful year in 1965.

An aggressive sales program, built around a unique structure of technical and marketing services, enabled the Division to continue its effective marketing of antiknock compounds. The over-all anti-

knock market was increased by favorable trends in gasoline consumption, but competition from other suppliers intensified.

The dollar volume of other products increased by more than one-third in 1965.

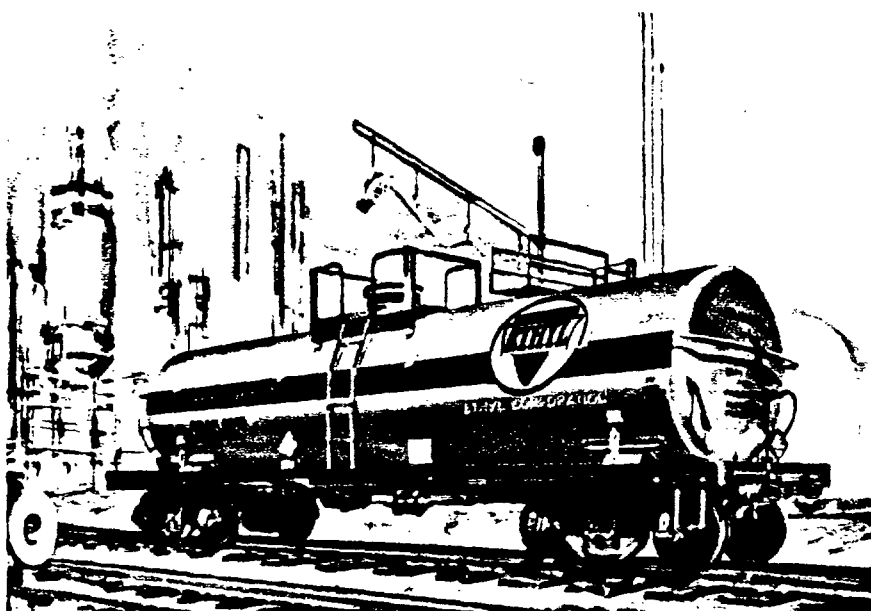
Notable contributors to this improvement were "Ethyl" Multi-Purpose Additive-Gasoline (which supplanted competitive products because of superior performance and the trouble-free quality), "Ethyl" Multi-Purpose Additive-Diesel (reflecting an increasing demand for premium diesel fuel), Ethyl's anti-oxidants (because of their superior cost-effectiveness), and "Ethyl" Combustion Improver for heating oils (reflecting a growing

need for cleaner burning distillate and heavy fuel oils).

During 1965, greater emphasis was placed on rendering individualized service to customers. This re-orientation made the Division's Refinery Technology, Automotive Product Application, and Marketing Services even more effective in building customer confidence and buying response.

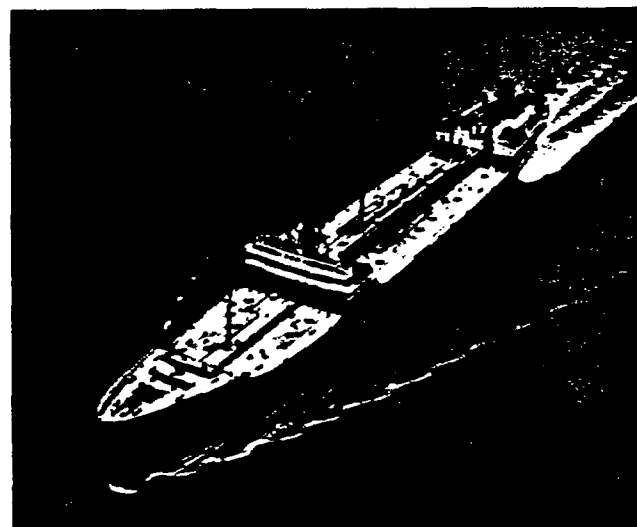
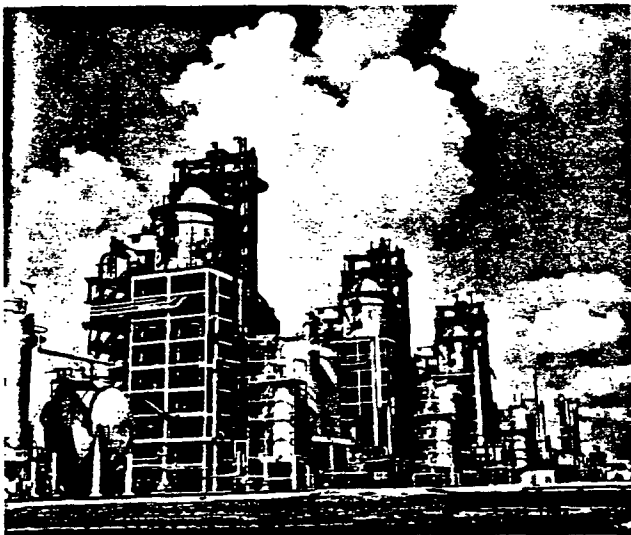
One of the newer activities of the Division carried forward in 1965 is the "Ethyl" Octane Analyzer. This is a system of electronic instrumentation which automates the blending of gasoline to any desired octane specification. It is an outgrowth of Ethyl's continuing effort to improve the mixing and handling of antiknocks in the refinery. It combines newly developed equipment with the "Ethyl" automatic knock-test engine to enable a refiner to monitor or control his gasoline blending operation.

In another area of service to the oil industry, the Petroleum Chemicals Division has for many years been helping the industry to increase the overall gasoline market by persuading motorists to drive more. As part of this, it recently produced a motion picture travelogue, "Road to Adventure, U.S.A.," which will be shown in theatres throughout the country as part of the President's "Discover America" program.



Ethyl's fleet of railroad cars, numbering over 1,300 cars, is taking on a new appearance as a result of a new design and color scheme.

Ethyl's petroleum chemicals, which are added to fuels and lubricants at refineries, help to improve the performance of these fuels and lubricants in a wide range of applications.



Industrial Chemicals

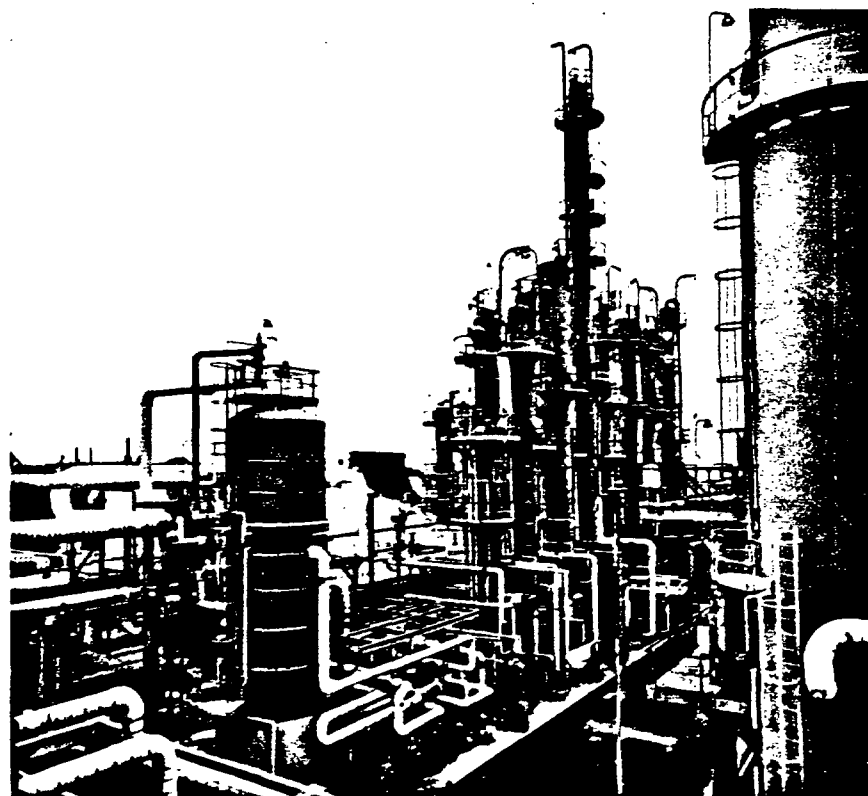
PRODUCTS: VINYL CHLORIDE / VINYLIDENE CHLORIDE / ETHYL CHLORIDE / ETHYLENE DICHLORIDE / METHYL CHLORIDE / CHLORINATED SOLVENTS (PERCHLOROETHYLENE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE) / CAUSTIC SODA / SODIUM / ALUMINUM ALKYL COMPOUNDS / ORTHOALKYLATED CHEMICALS / ORTHOALKYLATED ANTIOXIDANTS / HYDROPOLYMER OIL / SYNTHETIC PRIMARY ALCOHOLS / ALUMINUM SULFATE

THE Industrial Chemicals Division, with marketing responsibility for all Ethyl chemicals other than petroleum additives, experienced a record sales year, with demand for some of its products outstripping the Company's capacity. An even greater sales increase is anticipated for 1966.

Among the products contributing to the Division's record sales was vinyl chloride monomer, the chemical intermediate for polyvinyl chloride polymers. Ethyl is one of the largest merchant producers of vinyl chloride monomer, and 1965 saw a substantial increase in its sales of the product.

To meet the growing demands, expansion projects in monomer capacity have been underway at both the Baton Rouge and Houston plants. A substantial increase in monomer capacity was accomplished at Houston during 1965, and a much larger increase in capacity is nearing completion at Baton Rouge.

Related to this vinyl chloride expansion at Baton Rouge are major process improvements, including construction of an oxychlorination unit scheduled for completion in 1966. This facility will process



The newly-completed synthetic primary alcohols plant at Houston, seen above, marks Ethyl Corporation's entrance into another chemical field.

hydrogen chloride recovered from various chlorination operations. It represents another step forward in Ethyl's long experience and many contributions to the field of chlorinated hydrocarbons.

Nationwide, a major expansion of vinyl chloride capacity is underway by various

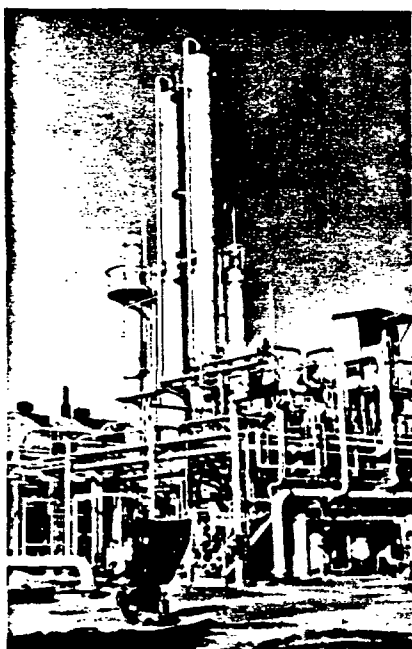
producers. However, Ethyl is confident it will be able to maintain and strengthen its competitive position in the field.

In related chemical fields, Ethyl increased its capacity at Baton Rouge for vinylidene chloride, another plastics intermediate, and is increasing its capacity at

Baton Rouge for methyl chloride, an industrial chemical used in the manufacture of synthetic rubber, silicones, and other products.

A large and growing area of operations for the Industrial Chemicals Division is the chlorinated solvents field. These products—1,1,1-trichloroethane, trichlorethylene and perchlorethylene—are used in a wide spectrum of applications, including industrial degreasing, metal finishing and commercial dry cleaning.

One of the many chemical processing units at the Ethyl manufacturing center in Baton Rouge.



As part of its over-all diversification program, Ethyl began marketing these three chlorinated solvents in 1964. Sales increased in 1965, and further increases are expected for 1966. The field is highly competitive, and the 1965 financial results were affected to some extent by price weakness.

Besides developing the market for its chlorinated solvents, Ethyl made good progress in its manufacturing plans for these chemicals. A new 1,1,1-trichloroethane plant at Baton Rouge, completed in 1964, was in commercial operation throughout most of 1965. In addition, Ethyl in 1965 announced plans for the construction of facilities for producing per- and trichlorethylene at Baton Rouge, and construction will be underway by mid-1966. When completed, these new facilities will mean that Ethyl is producing all three of the chlorinated solvents in new markets.

Meanwhile, to strengthen its distribution network for solvents, the Industrial Chemicals Division in 1965 completed arrangements which will permit water transportation to key market areas.

A major step in Ethyl's expansion and diversification program is its new synthetic primary alcohols plant at Houston. The plant was completed in 1965, and is now in the start-up phase.

The alcohols plant, which embodies many Ethyl research contributions, is producing synthetic primary alcohols which are used in the manufacture of biodegradable detergents and plasticizers.

In addition to alcohols, the plant is also producing aluminum alkyl compounds, which are widely used in the plastics and rubber industries, and aluminum sulfate, which is used in water purification and paper sizing, among other industrial uses. Completion of the Houston facility gives the company two domestic locations for producing aluminum alkyls.

Ethyl's sales of aluminum alkyls have shown a steady growth in every year since the Company entered the field. Continued substantial progress is forecast for 1966.

Other products marketed by the Industrial Chemicals Division include caustic soda, antioxidants, and sodium.

The full output of caustic soda from its caustic-chlorine plant in Baton Rouge has been sold out in each year since operations began in 1963, while the chlorine is used by the Company in its own manufacturing operations. Sales of antioxidants by the Division, primarily to the rubber and plastics industries, increased in 1965, and are expected to show a further gain in 1966. These products are derived from a unique chemistry developed and patented by Ethyl. Progress is being made in developing additional products to serve new needs.

Paper

PRODUCTS: UNBLEACHED SULFATE PULP / KRAFT PAPER BOARD / KRAFT WRAPPING PAPER / COLORED KRAFT / BAG AND SACK KRAFT / SPECIALTY KRAFT PAPERS / BLOTting PAPER / GASKET PAPER / FILTER PAPERS / ASPHALT, WAX, RESIN AND SILICONE TREATED PAPERS / COATED PAPER BOARD / MULTI-WALL BAGS / PLASTIC FILM BAGS / HANDLE SHOPPING BAGS / GROCERY BAGS / CORRUGATED CONTAINERS

ETHYL's Paper Division operated at capacity levels during 1965, and set new records in sales and earnings. Most of the Division's operations are conducted by Albemarle Paper Co. (formerly Albemarle Paper Manufacturing Co.).

Aided by increased demand for its products and improved prices throughout the paper industry, all of the Division's paper machines operated at capacity throughout the year. Demand for Albemarle's base paper grades was excellent, and at year's end, its Roanoke Rapids, N.C., mill had the largest backlog of orders in ten years.

Other factors that contributed to Albemarle's superior 1965 performance were an expansion and modernization of various facilities, the results of a cost reduction program begun in 1964, the consolidation of basic paper production capacity, and the development of new products.

In late 1965 and early 1966, the Roanoke Rapids mill completed two major construction projects. One was a new power plant, which will greatly reduce operating costs, and the second was a comprehensive modernization program which will both reduce costs and increase production efficiency and capacity. With



the completion of the modernization program, the kraft paper tonnage formerly produced in Richmond has been transferred to Roanoke Rapids, and the Richmond facility has been converted to other operations.

The Paper Division also benefited from its research and development work in 1965. In cooperation with Ethyl's Vis-Queen Division, a new family of "Queen-Cote" paper-plastic laminants was developed and introduced as well as Raymond Bag's highly successful "Multibag." Moreover, Albemarle's research staff developed 15 new filter papers for automotive and diesel applications, helped commercialize

a number of new kraft paper grades, and developed several new cast coated products.

The Interstate Bag Co. Division had another successful year, and the addition of a new plant at Flora, Ind., enabled it to strengthen its distribution organization and improve its service to customers.

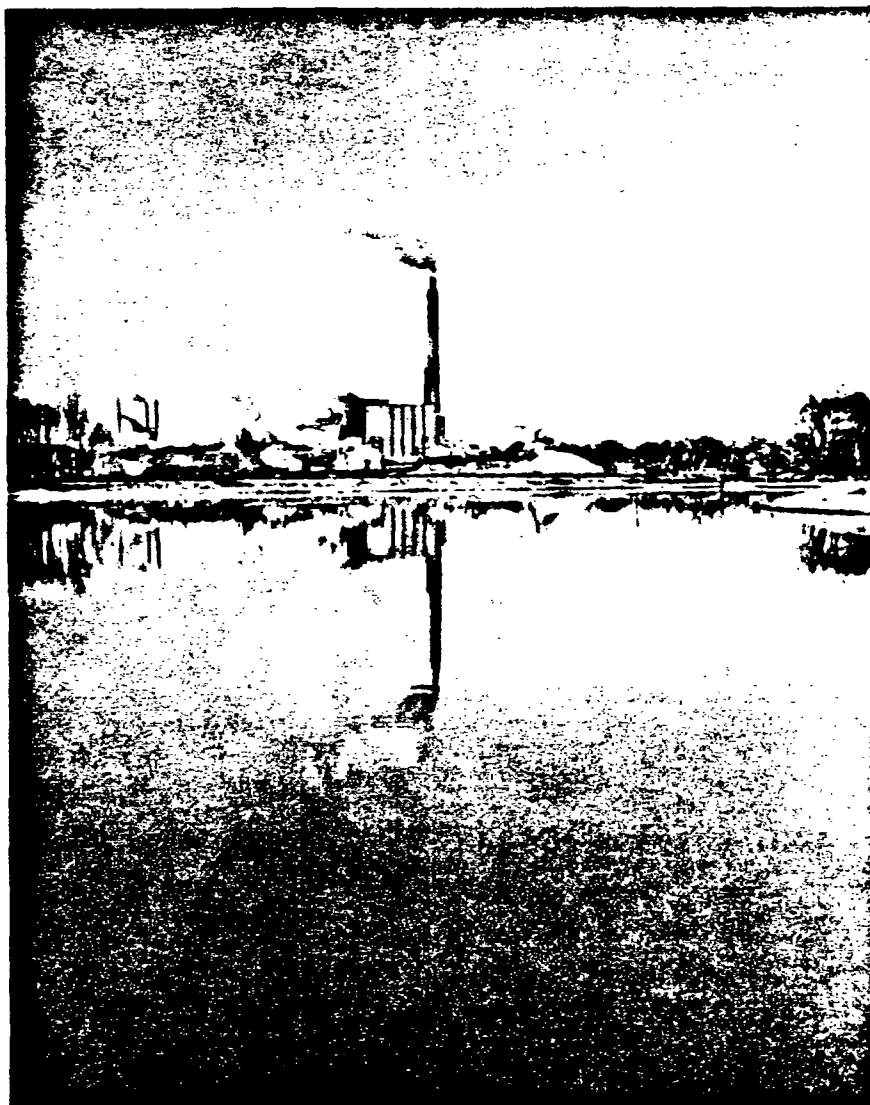
The Albemarle Container Division made changes and improvements at its Odenton, Md. and Richmond, Va. plants, increasing their productivity. Additional equipment will be installed at both plants in 1966 to broaden their product lines and improve their efficiency. A new container plant, scheduled for 1966, will

strengthen distribution and improve service to customers.

The Raymond Bag Co. Division increased efficiency and broadened its product line during 1965. Raymond's "Multi-bag" was well received in the packaging trade. Negotiations are under way to license its manufacture overseas as well as domestically.

The Consumer Bag and Packaging Corp. business, including a plant in Richmond, was acquired in 1965, and is now operated as a division producing grocery bags and sacks. Programs are under way to improve its operations, add new equipment, and develop new products.

Left, the Consumer Bag and Packaging Division plant in Richmond, which produces grocery bags and sacks . . . Right, the newly-completed power plant at the Roanoke Rapids pulp and paper mill . . . Below, this novel method is used at Roanoke Rapids to unload a truckload of wood chips into a receiving bin.



Plastics

PRODUCTS: POLYETHYLENE PACKAGING FILMS / POLYVINYL CHLORIDE PACKAGING FILMS / POLYETHYLENE BUILDING AND AGRICULTURAL FILMS / POLYPROPYLENE NETTING / POLYETHYLENE TAPE / "TIE-EYES" / POLYVINYL CHLORIDE PIPE, CONDUIT AND FITTINGS / POLYVINYL CHLORIDE PANELS / POLYVINYL CHLORIDE RESINS AND COMPOUNDS / POLYVINYL CHLORIDE (VYPAK) CONTAINERS

THE Plastics Division continued its program of diversification and growth during 1965 both in polyethylene film and in polyvinyl chloride resins and compounds and finished products.

VisQueen maintained its leadership in the production and sale of quality polyethylene film. Sales of polyethylene film increased to users of film in packaging, industrial, building and agricultural applications.

This sales increase was aided by significant quality improvements, particularly in the optical qualities of the film.

New uses for polyethylene film, such as polyethylene bread bags, continue to promote wider use of "VisQueen" film. Other product innovations, such as polyethylene film with an integral blue stripe to aid assembly of automobile seat covers, help to maintain VisQueen's position as a leader in the polyethylene film industry.

Unfortunately, the prices of polyethylene film declined somewhat during 1965. However, new production economies helped to offset this factor.

A new "VisQueen" polyethylene film plant—the Company's fourth—was completed and put into operation at LaGrange, Ga., during the latter part of the year. The

\$2.5 million plant increases Ethyl's production capacity and will provide improved service to VisQueen customers throughout the Southeast. It is expected to increase total polyethylene film sales substantially in 1966.

Meanwhile, the other three VisQueen plants—in Flemington, N. J., Terre Haute, Ind., and Fremont, Calif.—increased their capacity with the addition of new facilities and improvements to existing equipment. This increased capacity, coupled with other manufacturing economies, increased the productivity of all three plants.

VisQueen introduced three new major polyvinyl chloride products in 1965—PVC packaging film, PVC building panels and PVC "Bell:Ring" pipe.

PVC packaging films were introduced as protective wrappings for red meat, fresh produce and other products. In these applications, PVC films are ideal because of their sparkling clarity and their vapor barrier properties. Commercial production of these films was begun at new facilities in the Terre Haute plant.

VisQueen also began the marketing of PVC building panels during the year. These panels are sold to builders and contractors for use as skylights, glazing, siding, and other uses. PVC panels offer the builder a translucent panel with non-combustible features.

In the PVC pipe field, VisQueen took a major step forward with the introduction of its "Bell:Ring" pipe. This pipe has a unique mechanical slip joint which has

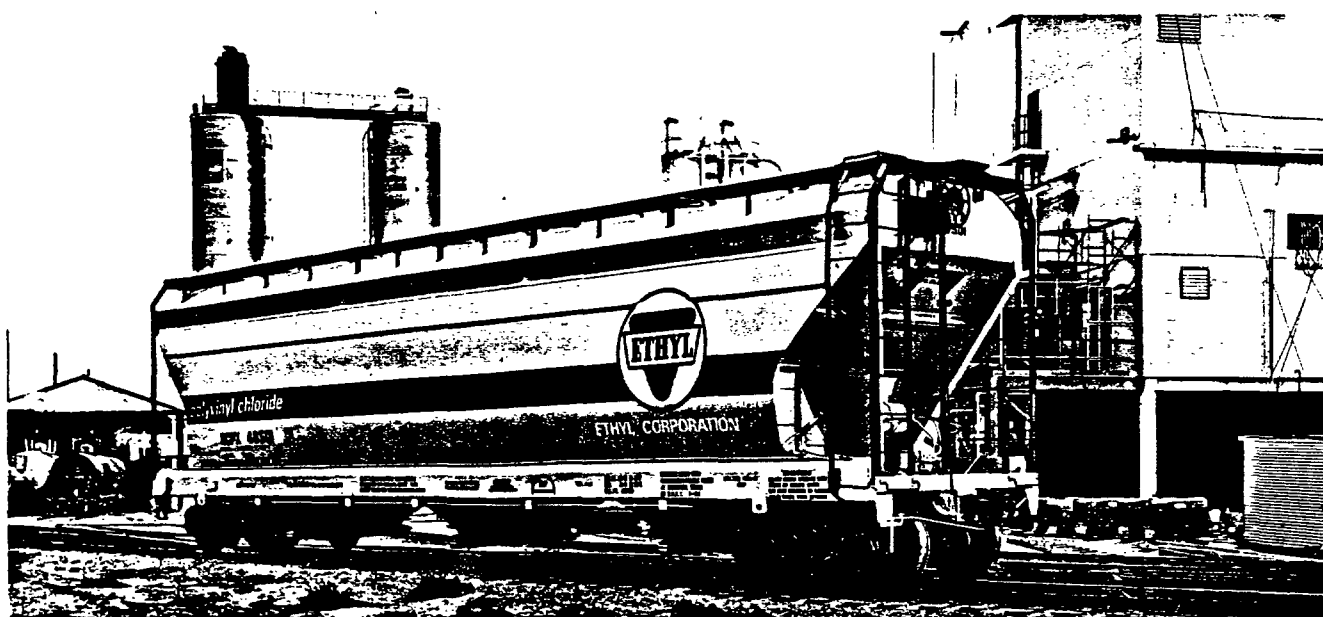
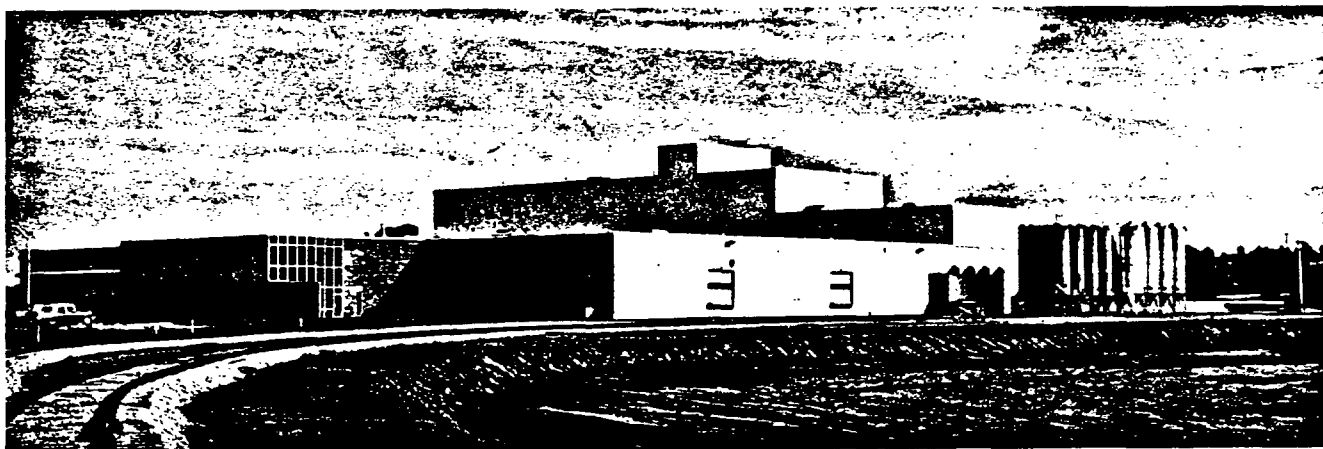
been well received by piping contractors because of its ease of installation, its freedom from leaks, and other advantages. Additional facilities for the production of "Bell:Ring" pipe are scheduled to be installed early in 1966.

The Polymer Division completed the compounds portion of its PVC plant during the first half of 1965, and began marketing these compounds. The Polymer Division gained an increasing number of outside customers during the year, in addition to supplying compounds to VisQueen.

Completion of the resin portion of the PVC plant was delayed for some months, due to a construction strike and a shortage of competent craftsmen. However, while no resin sales were made in 1965, the Polymer Division pilot plant developed formulations for many polymers, including homopolymer, copolymer, and emulsion resins. Samples of these resins, evaluated by potential customers, showed that Ethyl's resins are fully competitive with others on the market, and many of the polymers showed superior properties.

Vypak Corporation—owned jointly by Ethyl Corporation and Solvay et Cie., of Belgium—put into operation in 1965 a modern plant in Rockaway, N. J. for the production of rigid PVC plastic bottles. These plastic bottles can be made with a clarity approaching glass, and they are light-weight and impact resistant. Vypak is seeking to develop a market for these containers in consumer product fields, with initial sales efforts directed at toiletries, cosmetics and other products.

Two of the newest production facilities in Ethyl's Plastics Division are seen below. Top, the new polyethylene film plant—the Company's fourth—in LaGrange, Ga. Bottom, the newly-completed polyvinyl chloride resins and compounds plant which has gone into operation at Baton Rouge.



Ethyl International

PRODUCTS: PETROLEUM ADDITIVES / INDUSTRIAL CHEMICALS / PAPER PRODUCTS / PLASTICS

RECORD sales of antiknock compounds to overseas refiners, development of a full-fledged marketing organization in Europe, and the start of construction on an antiknock manufacturing plant in Greece highlighted the activities of the Ethyl International Division in 1965.

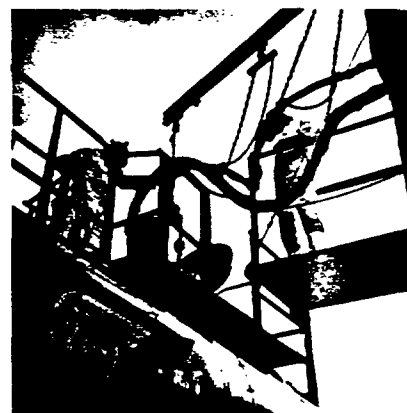
Sales of antiknock compounds, other petroleum additives, and industrial chemicals increased substantially as a result of Ethyl personnel being in Europe and Japan in order to be closer to customers and potential customers in those areas. At the same time, other Ethyl representatives continued to cover Latin America and other areas to increase Ethyl's participation in these growing markets.

Sales and service efforts were intensified in the Latin America area during

1965, with good results. As in the case of other growing world markets, plans are being made for more frequent contact with Latin American customers, in order to be of maximum service. Ethyl presently has five distribution terminals in the area.

Ethyl representatives spent substantially increased time in Japan during 1965 in recognition of the increasing importance of Japan and the Far East in Ethyl's international operations. Ethyl's representation there has resulted in increased sales. Negotiations have been conducted with certain Japanese companies on two joint ventures, which are subject to Japanese Government approval.

Ethyl S.A., the sales, service and distribution subsidiary for Europe, the Middle East and Africa, had its first full year of operations in 1965. A primary distribution terminal for antiknocks, located in

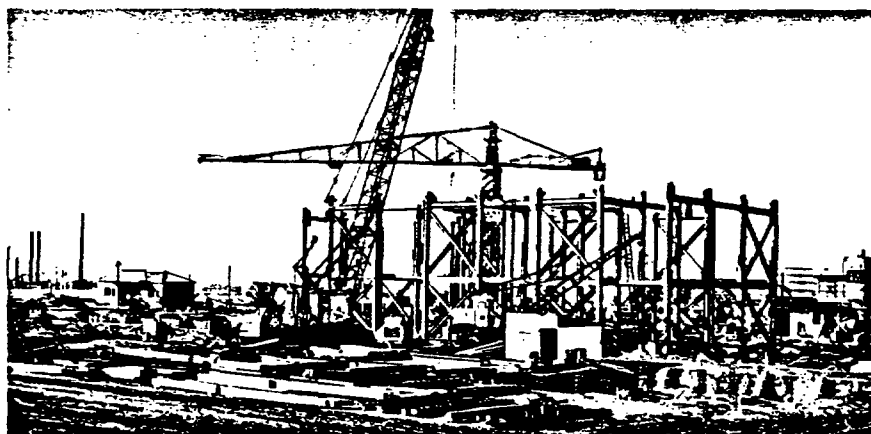


Ethyl's terminal in Dordrecht, Holland, which had its first full year of operation in 1965, provides a central distribution point in Europe for "Ethyl" antiknock compounds.

Dordrecht, Holland, was in full operation in 1965. This was augmented by other terminals in Norway and the Canary Islands, and additional European terminals are expected to be completed in 1966.

Construction began in July on a new antiknock compound manufacturing plant in Thessaloniki, Greece, which will give Ethyl tariff-free access to the European Common Market. The plant will provide antiknock compounds for refiners throughout Europe, the Middle East and Africa. It will also manufacture vinyl chloride monomer, for conversion into plastics, and related chemicals.

The Ethyl manufacturing plant in Greece, shown here in early stages of construction, will upon its completion serve refiners throughout Europe, the Middle East, and Africa.



Ethyl of Canada

PRODUCTS: PETROLEUM ADDITIVES / INDUSTRIAL CHEMICALS / ALUMINUM ALKYL CATALYSTS

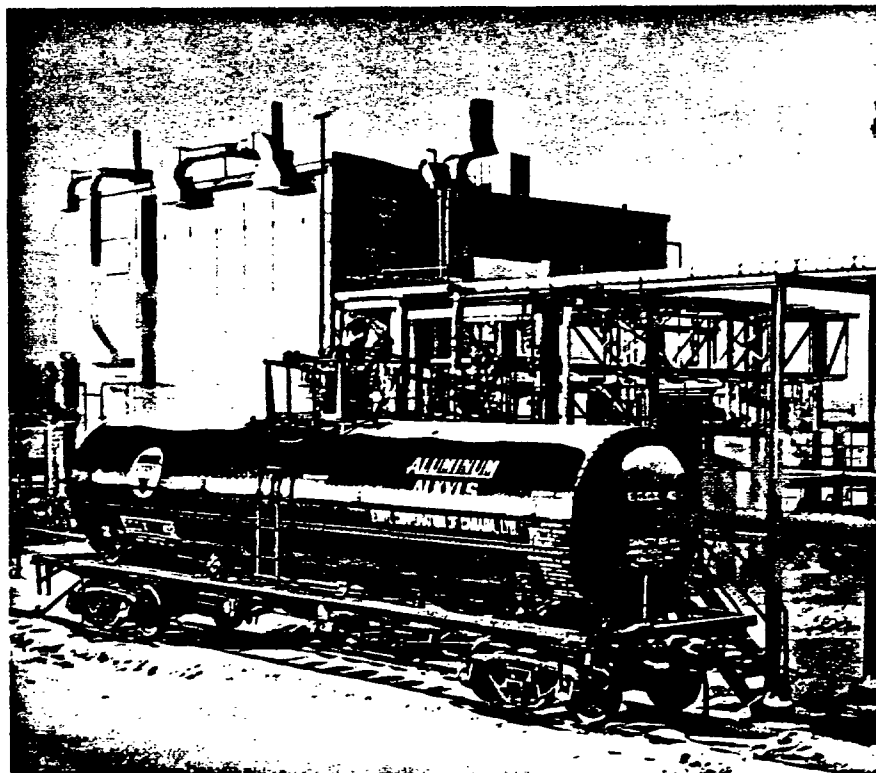
THE Company's subsidiary, Ethyl Corporation of Canada Limited, achieved record sales of antiknock compounds and chemical products in 1965 and also greatly strengthened its manufacturing capability.

Antiknock compound sales benefited from an estimated 5% increase in Canadian gasoline consumption during the year. Ethyl of Canada also increased its sales of other petroleum additives, catalysts and chemical intermediates.

During the summer, Ethyl of Canada completed and put into operation at its plant in Sarnia facilities for the manufacture of the newer antiknock compounds. These include tetramethyl lead and the mixed lead alkyls. Added to its capacity for tetraethyl lead, this means that a full range of antiknock compounds is available to the Canadian refiners from a single domestic source.

At the same time, Ethyl of Canada continued to provide Canadian refiners with specialized services to help them in their refining and marketing operations. These services include gasoline testing, current reports on Canadian gasoline quality and trends, and refinery technology.

A major antiknock supplier has built a manufacturing plant in Canada, marking the first Canadian-based competition for Ethyl of Canada. While this new competition will have some effect on sales, Ethyl of Canada looks for some offsetting



The Ethyl of Canada plant in Sarnia, Ontario manufactures aluminum alkyls and petroleum additives as well as a full line of antiknock compounds.

influences in the continuing increase in gasoline consumption and the expected improvement in gasoline quality.

In 1964, Ethyl of Canada added new facilities for other additives and industrial chemicals. These include multi-purpose additives for gasoline, antioxidants for fuels and lubricants, and aluminum

alkyl compounds which are used as catalysts in synthetic rubber and plastics.

Increased sales of these chemicals contributed to Ethyl of Canada's record sales in 1965, and further sales gains are anticipated in 1966.

Ethyl of Canada also plans to expand its line of industrial chemicals in 1966.

Employee Relations / Advertising / Public Relations

EMPLOYEE RELATIONS THE Company is keenly aware of its dependence on competent and loyal employees for the continued success of its operations.

Management devotes considerable time to insure that its working conditions are excellent and that its wages and benefits in each division are in line with those of other companies with whom we are in competition. A measure of accomplishment in these areas is indicated by the fact that our turnover ratio is one of the lowest in industry.

In keeping with Ethyl's rapid expansion program, recruiting efforts have been intensified, and substantially more time and effort have been devoted to company-

sponsored in-plant training to insure an adequate reservoir of trained personnel.

As of December 31, 1965, there was a total of 7,870 employees of whom some 3,700 were represented by union bargaining agents.

During 1965, a new three-year agreement was reached covering production and maintenance employees at the Roanoke Rapids pulp and paper mill. At Baton Rouge the agreement covering TEL-Sodium employees was extended for two years and that covering Hydrocarbon area employees for one year. Employees at the Odenton, Md., and Richmond, Va., plants of Albemarle Container Division voted in NLRB supervised elections on

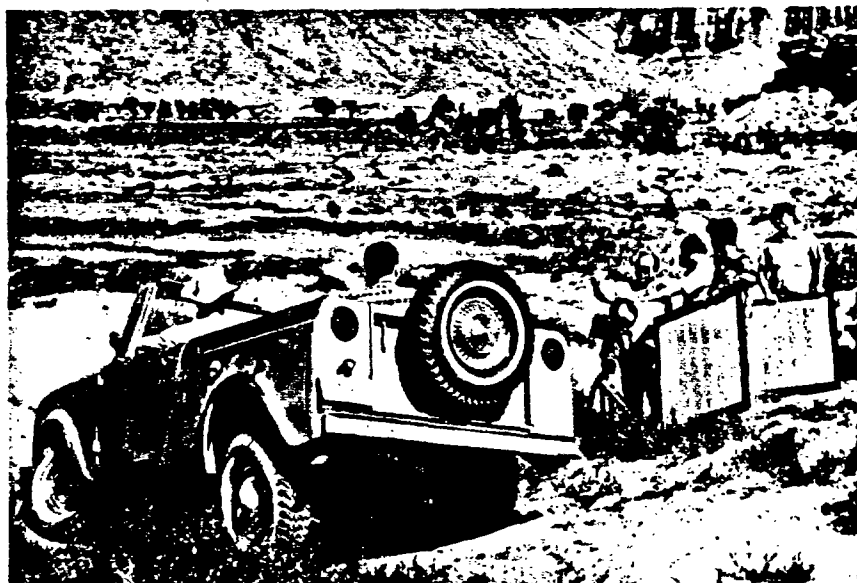
new bargaining agents. Negotiations at Odenton were in progress at year's end, and negotiations at the Richmond plant began in January, 1966.

At the Houston plant, in March, 1965, proceedings were filed with the National Labor Relations Board by unions attempting to sever crafts from the existing unit and contesting the representation rights of the incumbent bargaining agent. At year-end, those unions attempting to sever crafts withdrew from the proceeding. In an NLRB-scheduled election, late in January, 1966, the present union was again certified as the bargaining agent for the maintenance and production unit.

In 1966, eight bargaining agreements



Above, educational materials form part of Ethyl's comprehensive employee indoctrination program ... Right, a scene from Ethyl's new color motion picture, "Road to Adventure, U.S.A."



will be up for renewal in various divisions of the Company.

ADVERTISING THE Advertising and Sales Promotion department, as part of its responsibilities, carried forward Ethyl's corporate identity advertising program in 1965. The program's objective is to project the image of Ethyl Corporation as a growing, diversifying company with a varied line of products, serving a wide range of industries.

In addition to this corporate program, other advertisements appeared regularly in industrial publications in many fields. These are designed to promote the products and services of the Ethyl divisions, thus reinforcing the various sales programs. Antiknock compounds, for example, received special emphasis in leading oil industry publications. Industrial chemicals were advertised in specialized publications as well as in broad-based chemical magazines. Other Ethyl products received similar advertising support.

During 1965, the Advertising and Sales Promotion department created and produced a variety of individual sales promotional tools, such as printed materials, displays and visuals, as well as entire programs designed for use by the Company divisions in promoting Ethyl products and services.

PUBLIC RELATIONS THE Public Relations department in 1965 was responsible for numerous programs and services on behalf of the Company and its divisions.



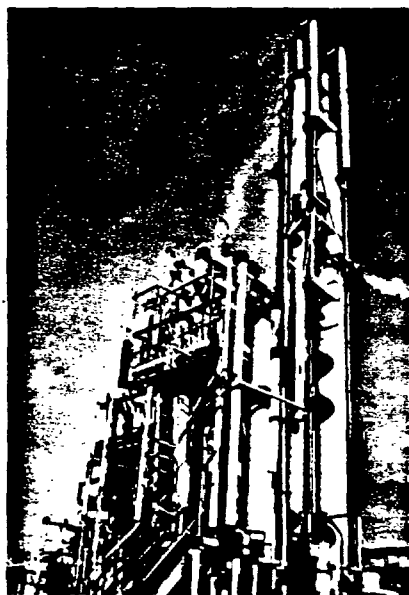
Examples of the highly successful advertising campaigns conducted in 1965 by Ethyl are seen above.

Publicity and public relations programs were undertaken to support the introduction of new products, to supply information about the Company to the general public, the financial community and other important groups, and to promote the reputation of the Company as a progressive organization of growing importance in many fields.

During 1965, the department continued its program of regular informational and educational services. Included among these are the *Ethyl News*, which is widely distributed throughout the oil, chemical, automotive and other industries as well as to stockholders and employees,

and the *Ethyl Reporter*, which is distributed to employees at many Ethyl locations. As part of its educational activities, the department prepared a new edition of its highly successful booklet, "The Story of Gasoline," which tells in simple terms many facts about gasoline manufacture and utilization and the role that antiknock compounds play in improving gasoline performance. A Spanish language edition of the booklet is planned for 1966.

Research and Development



Pilot plants, such as the one shown above, play an important part in Ethyl's broad research and development programs.

THE Research and Development department engaged in a broad range of research projects during 1965 in support of the Company's present business and future goals. The research budget in 1965 was equal to about 4% of the Company's sales.

In view of the large number of production facilities currently under construction, a substantial part of the work in this department in 1965 involved process design for these projects. This included process work on the antiknock plant under construction in Greece, on the oxychlorination

plant being built in Baton Rouge, on Ethyl's expansion of its vinyl chloride monomer capacity, and on its new polyvinyl chloride plant.

Another phase of Ethyl research was concerned with development work to improve present processes and reduce manufacturing costs. This work is essential in view of the highly competitive nature of Ethyl's fields of business and the constantly changing technology.

Significant progress was made in research programs in several fields, including polymers, additives for petroleum products, detergent intermediates, and other industrial chemicals. The completion of programs such as these continues to provide from within a foundation for continuing company growth and diversification.

A constant aim of Ethyl research is to investigate new product opportunities and discover new chemical reactions, and on the basis of these findings to develop new processes and commercial products. In recent years, moreover, Ethyl's chemical, plastics and paper technologists have worked closely together on joint projects.

A significant area of Ethyl's R & D activities involves special research assignments for various government agencies. During the past year, contract research programs were conducted on behalf of the Department of Defense, the Department of Health, Education and Welfare, and the Atomic Energy Commission. Numerous fields were investigated, including specialized fuels and lubricants.

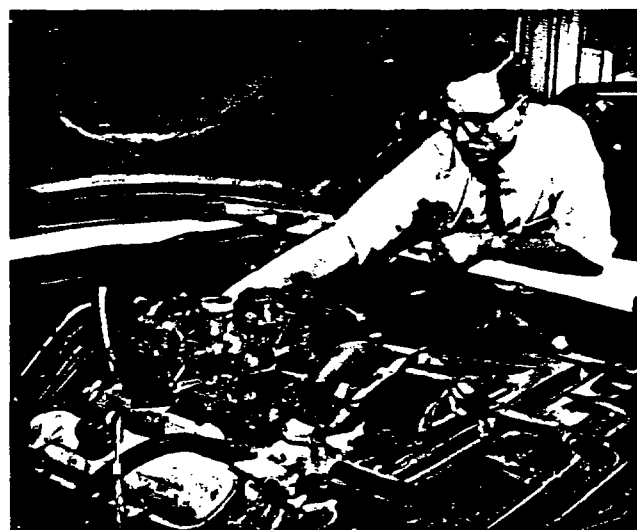
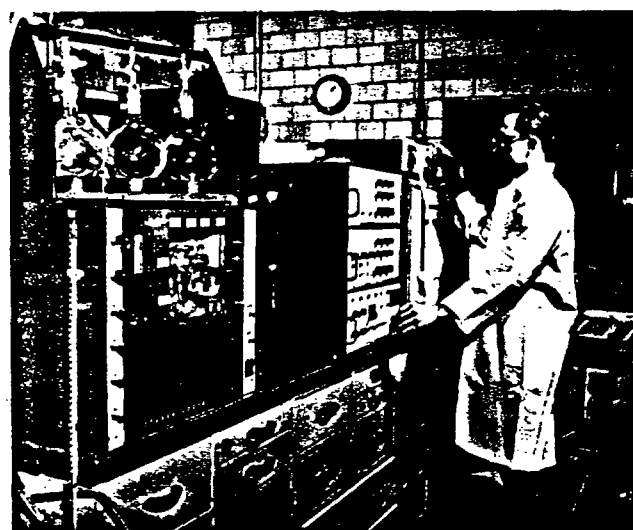
In January, 1966, Ethyl's Detroit research laboratories reported to the Society of Automotive Engineers on experimental automobile engine induction systems, developed by Ethyl, for reducing undesirable emissions in automobile exhaust. Ethyl's new systems can not only meet the present California requirements for reduced exhaust emissions but also the more stringent standards scheduled there for 1970. And the systems meet these rigid standards without significantly affecting car performance, fuel economy or driveability.

While Ethyl's experimental systems would require extensive further development before they could be commercialized, it was pointed out, they nevertheless illustrate some of the further possibilities for cleaner air that can be achieved.

Ethyl's research laboratories have also been active in a fundamental study of factors such as automotive engine design and operating conditions, and fuel and lubricant compositions, as they relate to exhaust emissions. Attention is also being given to the possibility of developing products of significant value in the reduction of these emissions.

Reflecting the high level of Ethyl's research activity, over 320 patent applications were filed in the United States and various foreign countries during 1965. At the same time, Ethyl received about 85 domestic and 150 foreign patents on earlier applications. Ethyl now holds almost 1,000 unexpired U. S. patents, and maintains nearly 750 abroad.

Ethyl's research, which encompasses many fields, involves the use of highly intricate and specialized equipment and prototype models of new developments.



consolidated balance sheets

Assets

	December 31	
	1965	1964
Current assets:		
Cash	\$ 18,860,191	\$ 15,191,756
Short-term securities	7,806,551	43,838,707
Accounts receivable	37,241,462	32,001,232
Inventories	41,570,190	32,867,755
Prepaid expenses	576,283	1,241,054
Total current assets	<u>106,054,677</u>	<u>125,140,504</u>
Property, plant and equipment	259,193,670	205,779,125
Less, Accumulated depreciation and depletion	<u>64,645,557</u>	<u>47,297,773</u>
Net property, plant and equipment	<u>194,548,113</u>	<u>158,481,352</u>
Investments in affiliated companies	8,071,943	8,157,803
Deferred charges and other assets	16,446,644	13,180,406
Patents, contracts and other intangibles	<u>10,217,019</u>	<u>11,877,952</u>
	<u><u>\$335,338,396</u></u>	<u><u>\$316,838,017</u></u>

The accompanying notes are an integral part of these statements.



ethyl corporation
and
subsidiaries

Liabilities

	December 31	
	1965	1964
Current liabilities:		
Accounts payable and accrued expenses	\$ 26,640,091	\$ 22,325,358
Long-term debt, current portion	2,535,211	10,185,211
United States and foreign income taxes	7,016,088	9,447,532
Total current liabilities	<u>36,191,390</u>	<u>41,958,101</u>
Long-term debt	180,294,971	182,414,532
Estimated income taxes payable in future years	11,681,400	9,999,884
Provision for employee benefits	6,517,274	6,363,730

Stockholders' Equity

Capital stock:		
6% cumulative preferred, par \$100 per share	3,803,600	4,213,400
Common, par \$1 per share	9,487,380	8,438,658
Capital surplus	25,074,528	20,861,554
Retained earnings	62,287,853	42,613,238
	<u>100,653,361</u>	<u>76,126,850</u>
Less, Preferred stock in treasury, 246 shares (at cost)		25,080
Total stockholders' equity	<u>100,653,361</u>	<u>76,101,770</u>
	<u>\$335,338,396</u>	<u>\$316,838,017</u>

The accompanying notes are an integral part of these statements.

consolidated statements of income and surplus

Statements of Income and Retained Earnings

	Years Ended December 31	
	1965	1964
Income:		
Net sales	\$305,011,163	\$277,478,496
Miscellaneous income, net	2,739,565	2,951,885
	<u>307,750,728</u>	<u>280,430,381</u>
Costs and expenses:		
Cost of goods sold	212,456,499	190,859,901
Selling and general expenses	42,439,636	39,038,292
Interest and financing costs, long-term debt	11,624,563	11,793,815
United States and foreign income taxes	17,047,000	18,927,000
	<u>283,567,698</u>	<u>260,619,008</u>
Net income	24,183,030	19,811,373
Retained earnings at beginning of year	42,613,238	24,575,976
	<u>66,796,268</u>	<u>44,387,349</u>
Deduct, Cash dividends:		
Preferred stock, \$6.00 per share	239,309	259,658
Common stock, \$.46 per share in 1965 and \$.20 in 1964	4,269,106	1,514,453
	<u>4,508,415</u>	<u>1,774,111</u>
Retained earnings at end of year	<u>\$ 62,287,853</u>	<u>\$ 42,613,238</u>

Statements of Capital Surplus

Balance at beginning of year	\$ 20,861,554	\$ 15,955,149
Excess of proceeds over par value of 963,000 and 1,228,200 shares of common stock issued upon exercise of warrants	3,450,750	4,190,267
Excess of cash received over par value of 85,722 and 83,037 shares of common stock issued under stock option plan	766,584	720,339
Excess of cost over par value of preferred stock canceled	(4,360)	(4,201)
Balance at end of year	<u>\$ 25,074,528</u>	<u>\$ 20,861,554</u>

The accompanying notes are an integral part of these statements.

notes to financial statements



ethyl corporation
and
subsidiaries

1. Inventories:

INVENTORIES include:

	1965	1964
Finished goods	\$15,089,284	\$12,256,046
Raw materials and work in process	21,202,821	15,869,070
Stores, supplies, etc. .	5,278,085	4,742,639
	<u>\$41,570,190</u>	<u>\$32,867,755</u>

Inventories are stated at the lower of cost or market, with cost being determined on the last-in, first-out basis with respect to approximately \$26,571,000 at December 31, 1965 and \$20,271,000 at December 31, 1964, and generally on an average cost basis with respect to the balance.

2. Investments in Affiliated Companies:

INVESTMENTS in unconsolidated affiliates are stated at cost or less and represent the Corporation's investments in and advances to Ethyl-Dow Chemical Company and Vypak Corporation, 50%-owned companies, and Halifax Timber Company which is wholly owned.

The Corporation's investments in 50%-owned companies exceed its equity in the net assets of those companies at December 31, 1965 by approximately \$3,399,000 representing the excess of investment over equity in net assets of Ethyl-Dow at date of acquisition (November 30, 1962) less undistributed earnings of \$53,000 since that date. Dividends received from Ethyl-Dow were \$1,800,000 in 1965 and \$1,640,000 in 1964. Such amounts were not significantly different from the Cor-

poration's equity in Ethyl-Dow earnings.

The investment in Halifax Timber is less than the underlying net assets by approximately \$109,000 which represents undistributed earnings. The net income of Halifax Timber is not significant.

3. Property, Plant and Equipment:

PROPERTY, plant and equipment is stated at cost as follows:

	1965	1964
Land	\$ 12,811,929	\$ 11,315,705
Timberlands and standing timber . . .	4,110,338	3,984,457
Buildings	32,749,874	29,930,890
Machinery and equipment	209,521,529	160,548,073
	<u>\$259,193,670</u>	<u>\$205,779,125</u>

4. Deferred Charges and Other Assets:

DEFERRED charges at December 31, 1965 consist principally of unamortized discount on long-term debt and other deferred financing expenses. Also included therein is \$2,400,000, the amount paid to selling stockholders under a contract to purchase a controlling interest in the William L. Bonnell Co., Inc. The purchase is scheduled to be consummated not later than June 30, 1966 and will involve payment of additional amounts aggregating \$8,100,000 if all the outstanding stock of the company is acquired.

5. Patents, Contracts and Other Intangibles:

PATENTS and contracts with an unamortized cost basis of \$4,726,328 at Decem-

notes to financial statements *continued*

ber 31, 1965 are being amortized over their respective lives; other intangibles are stated at cost.

6. *Long-Term Debt:*

REFERENCE is made to "Long-Term Debt" on page 9 of this report for information concerning the Company's borrowings.

7. *Capital Stock:*

As of December 31, 1965, there are 12,156,000 shares of common stock authorized, of which 9,487,380 shares are outstanding.

As of December 31, 1965, there are 1,000,000 shares of cumulative first preferred stock, \$100 par, authorized, of which 38,036 shares of 6% Series A are outstanding at that date. The 6% Series A stock is callable at \$101 and is entitled to annual sinking fund contributions of \$114,108.

8. *Warrants:*

At December 31, 1965, there are outstanding warrants exercisable on or before November 1, 1982 which entitle the holders thereof to purchase 208,800 shares of unissued common stock, \$1 par value, at \$4.58 per share. During 1965, warrants for 963,000 shares were exercised.

9. *Stock Option Plan:*

Under the Corporation's restricted stock option plan, 900,000 shares of unissued common stock were reserved for issuance to officers and other key employees. At December 31, 1964, there were outstanding options to purchase 703,710 shares at prices ranging from \$9.42 to \$24.00. Dur-

ing the year ended December 31, 1965, options for 85,722 shares were exercised and options for 42,438 shares were canceled, leaving outstanding at December 31, 1965 options covering 575,550 shares, of which options for 171,390 shares are exercisable at that date. There were 110,004 shares available for grant under the plan at the beginning of the year and 152,442 shares at the end of the year.

10. *Restricted Payments:*

THE CORPORATION's articles of incorporation and note agreements contain restrictions, among others, against the payment of cash dividends. At December 31, 1965, \$18,650,000 of retained earnings is free of such restriction under the agreement presently most restrictive.

11. *Investment Credit:*

THE CORPORATION's provision for United States and foreign income taxes was reduced (and net income increased) by investment credits of \$2,350,000 and \$441,000 in 1965 and 1964, respectively.

12. *Depreciation, Depletion and Amortization:*

DEPRECIATION and depletion charged to income amounted to \$16,208,622 and \$14,849,528 in 1965 and 1964, respectively. Amortization of intangibles and of deferred discount and financing expenses charged to income amounted to \$2,458,333 and \$2,113,225 in the respective years.

13. *Reclassifications:*

FOR PURPOSES of comparison, certain reclassifications have been made in the accompanying 1964 balance sheet.

auditors' report



ethyl corporation
and
subsidiaries

To the Board of Directors and Shareholders of Ethyl Corporation:

We have examined the consolidated balance sheet of ETHYL CORPORATION and SUBSIDIARIES as of December 31, 1965, and the related statements of income and retained earnings and of capital surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We previously examined and reported upon the Corporation's consolidated financial statements for the year ended December 31, 1964.

In our opinion, the accompanying statements present fairly the consolidated financial position of Ethyl Corporation and Subsidiaries at December 31, 1965 and 1964, and the results of their operations for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Lybrand Ross Bros Montgomery

LYBRAND, ROSS BROS. & MONTGOMERY

New York, January 27, 1966.

ten-year summary

	Years Ended December 31		
	1965	1964	1963
<i>Sales and Income</i>			
Net sales ⁽²⁾	\$305,011,163	\$277,478,496	\$226,554,354
Income before non-cash items and income taxes	59,896,985	55,701,126	42,249,258
Depreciation, depletion and amortization	18,666,955	16,962,753	15,131,178
Income taxes, including deferred	17,047,000	18,927,000	13,560,000
Net income	24,183,030	19,811,373	13,558,080
Cash flow	44,106,269	37,698,396	30,388,016
<i>Financial Condition</i>			
Working capital	\$ 69,863,287	\$ 83,182,403	\$ 67,337,401
Ratio of current assets to current liabilities	\$2.93 to \$1.00	\$2.98 to \$1.00	\$3.36 to \$1.00
Property, plant and equipment (Net)	194,548,113	158,481,352	155,558,493
Expenditures for property, plant and equipment	52,050,000	20,609,000	18,862,000
Long-term debt	180,294,971	182,414,532	192,599,743
<i>Common Stock</i>			
Number of shares outstanding	9,487,380	8,438,658	2,375,807
Net income per share ⁽³⁾	\$ 2.52	\$2.08	\$1.43
Income taxes per share ⁽³⁾	1.80	2.01	1.46
Book value per share ⁽⁴⁾	\$10.21	\$8.52	\$6.69

(1) Includes 4 months of combined paper and chemical operations. All prior fiscal years represent paper operations only.

(2) Net sales are stated before deducting freight cost.



ethyl corporation
and
subsidiaries

Years Ended March 31						
1963 ⁽¹⁾	1962	1961	1960	1959	1958	1957
\$ 99,814,250	\$48,578,227	\$50,320,518	\$44,572,285	\$35,881,981	\$34,527,980	\$34,737,764
15,391,623	5,776,220	7,252,998	6,138,973	6,007,198	5,781,548	6,346,016
6,555,892	2,294,903	2,077,980	2,041,843	1,607,425	1,482,130	1,200,675
4,455,000	1,719,051	2,740,399	1,958,081	2,266,473	2,378,411	2,839,501
4,380,731	1,762,266	2,434,619	2,139,049	2,133,300	1,921,007	2,305,840
12,117,007	4,211,875	4,680,496	4,344,420	3,785,924	3,795,461	3,799,630
\$ 63,000,811	\$10,313,111	\$ 8,586,720	\$ 7,950,568	\$ 9,143,917	\$ 7,640,165	\$ 6,790,823
\$2.75 to \$1.00	\$3.29 to \$1.00	\$2.73 to \$1.00	\$3.22 to \$1.00	\$3.91 to \$1.00	\$3.92 to \$1.00	\$2.73 to \$1.00
150,959,130	29,221,972	28,336,492	27,742,696	24,512,702	20,015,076	18,231,910
4,838,805	4,820,189	2,644,359	5,291,737	6,099,122	2,957,526	5,557,245
196,375,319	15,522,300	13,092,000	13,178,500	13,793,100	8,700,000	9,109,043
1,187,362	1,029,674	976,956	971,803	760,992	699,761	621,020
\$.63	\$.24	\$.35	\$.31	\$.32	\$.29	\$.40
.69	.28	.45	.32	.39	.41	.53
\$5.31 ⁽⁵⁾	\$3.35	\$3.19	\$2.92	\$2.71	\$2.43	\$2.21

(3) Based on the average number of shares outstanding in each year, adjusted for stock splits and stock dividends, except for the years ended December 31, 1963, 1964, and 1965, which are based on the number of shares outstanding at the end of these years, with 1963 adjusted for the 3-for-1 stock split in December 1964 and 1963 and 1964 adjusted for 2,191,200 shares issued in 1964 and 1965 upon exercise of warrants.

(4) Adjusted for stock splits and stock dividends.

(5) Includes addition to capital surplus of \$1.56 per share resulting from sale of warrants.

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ethyl corporation

Officers and Staff

FLOYD D. GOTTWALD
Chairman of the Board

FLOYD D. GOTTWALD, JR.
Vice Chairman of the Board

GEORGE F. KIRBY
President

WILLIAM R. PERDUE, JR.
Executive Vice President
& Treasurer

BRUCE C. GOTTWALD
Executive Vice President
& Secretary

MALCOLM P. MURDOCK
Senior Vice President
Petroleum Chemicals

GLENN O. HAYES
Vice President
Manufacturing

ROBERT HERZOG
Vice President
Planning

JOSEPH M. LOWRY
Vice President
Special Assignments

KENNETH L. SWARTWOOD
Vice President
Research & Development

JAMES E. BOUDREAU
Director of Public Relations

JAMES H. KIRBY
Controller

JAMES B. LONERGAN
Director of Advertising
& Sales Promotion

FRANK J. McNALLY
Director of Finance

G. SAMUEL ROBERTS
Chief Engineer

STEPHEN B. RODI
Director of Employee Relations

FREDERICK P. WARNE
General Counsel

Directors

FLOYD D. GOTTWALD*
Chairman

FLOYD D. GOTTWALD, JR.*
Vice Chairman

JOSEPH A. COSTELLO
Retired Vice President,
Ethyl Corporation

S. DOUGLAS FLEET
Retired Vice President,
Ethyl Corporation

BRUCE C. GOTTWALD*

GEORGE F. KIRBY*

JOSEPH M. LOWRY

ROBERT T. MARSH, JR.
Retired Chairman of the Board
First & Merchants National Bank
Richmond, Va.

MALCOLM P. MURDOCK

LEWIS F. POWELL, JR.
Partner
Hunton, Williams, Gay,
Powell & Gibson
Richmond, Va.

WILLIAM R. PERDUE, JR.*

E. CLAIBORNE ROBINS
President
A. H. Robins Company
Richmond, Va.

S. BUFORD SCOTT
Partner
Scott & Stringfellow
Richmond, Va.

ERWIN H. WILL
Chairman of the Board
Virginia Electric & Power Co.
Richmond, Va.

*Member of Executive Committee

Divisions

Petroleum Chemicals

MALCOLM P. MURDOCK
Senior Vice President

ROBERT A. DOUGLASS
General Sales Manager

RICHARD K. SCALES
Technical Director

Industrial Chemicals

JAMES M. GILL
General Manager

STANLEY A. HARRIS
Sales Manager
Chlorinated Solvents

HARRY KUHE
Sales Manager
General Chemicals

Ethyl International

ALBERT B. HORN
Division Vice President
& General Manager

CHESTER D. CARTER
Division Vice President
Business Development

ETHYL S.A.

WILLIAM J. RUSHER
President
Managing Director

ETHYL HELLAS CHEMICAL COMPANY, S.A.

ELMO F. DIEDRICH
Vice Chairman
& Managing Director

Plastics

CLARENCE M. NEHER
Division Vice President
& General Manager

VISQUEEN DIVISION

LLOYD B. ANDREW
General Manager

HARRY C. BYRNE, JR.
General Sales Manager

JACK C. WRIGHT
Operations Manager

HOWARD L. LEVENTHAL
Technical Director

POLYMER DIVISION

HARRY M. ZIMMERMAN
General Manager

TONNIE A. HOYLE
Sales Manager

Ethyl Corporation
of Canada Limited
(Canadian Division)
Wholly-owned subsidiary

ALAN C. TULLY
President

JOHN F. KOEHNLE
Vice President

ROBERT H. SHANNON
Manager / Chemical
Products Department

Albemarle Paper Company
(Paper Division)
Wholly-owned subsidiary

FLOYD D. GOTTWALD
Chairman of the Board

FLOYD D. GOTTWALD, JR.
President

GOBLE W. BRYANT
Executive Vice President
& General Manager

KIRKWOOD F. ADAMS
Executive Vice President
Pulp and Paper Manufacturing

JOSEPH M. LOWRY
Executive Vice President
& Treasurer

BRUCE C. GOTTWALD
Vice President

C. RAYMOND HAILEY
Vice President / Budget Director

BRENTON S. HALSEY
Vice President / Planning

LAWRENCE K. NORTON
Vice President / Sales

KENNETH D. RUNNING
Vice President / Ass't. Manager
Roanoke Rapids Division

JOHN T. WALTON
Vice President / Converting

HUGH H. BAIRD, JR.
Controller

W. DOUGLAS GOTTWALD
Secretary

JOHN E. BRYAN, JR.
Director of Industrial Relations

ALBEMARLE CONTAINER DIVISION

JOHN A. COMLY
General Manager

ROBERT G. REDMAN
General Sales Manager

JOHN B. MARSCH
Sales & General Manager
Odenton Plant

CONSUMER BAG AND PACKAGING DIVISION

M. LEBBY BOINEST, JR.
Executive Vice President
& General Manager

JOHN W. EDWARDS
Vice President / Manufacturing

INTERSTATE BAG COMPANY

CLAUDE V. ALLEN
General Manager

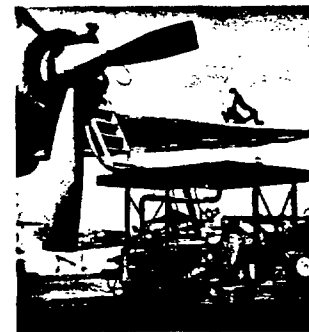
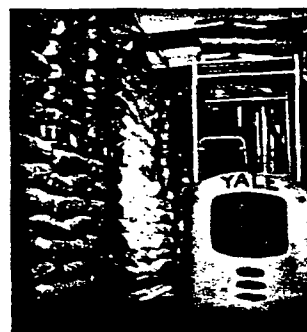
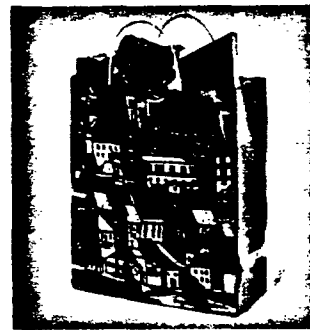
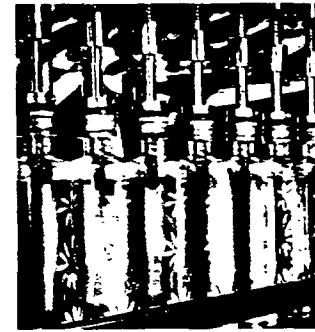
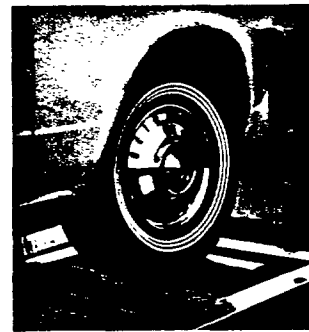
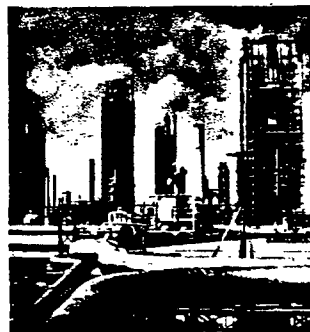
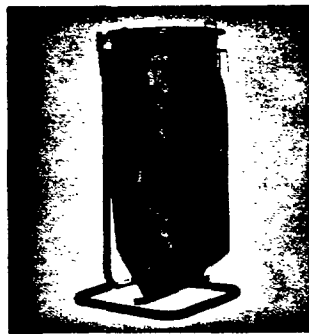
PARVIN E. CANTRELL
Vice President / Sales

RAYMOND BAG DIVISION

DONALD R. RUSSELL
President / General Manager

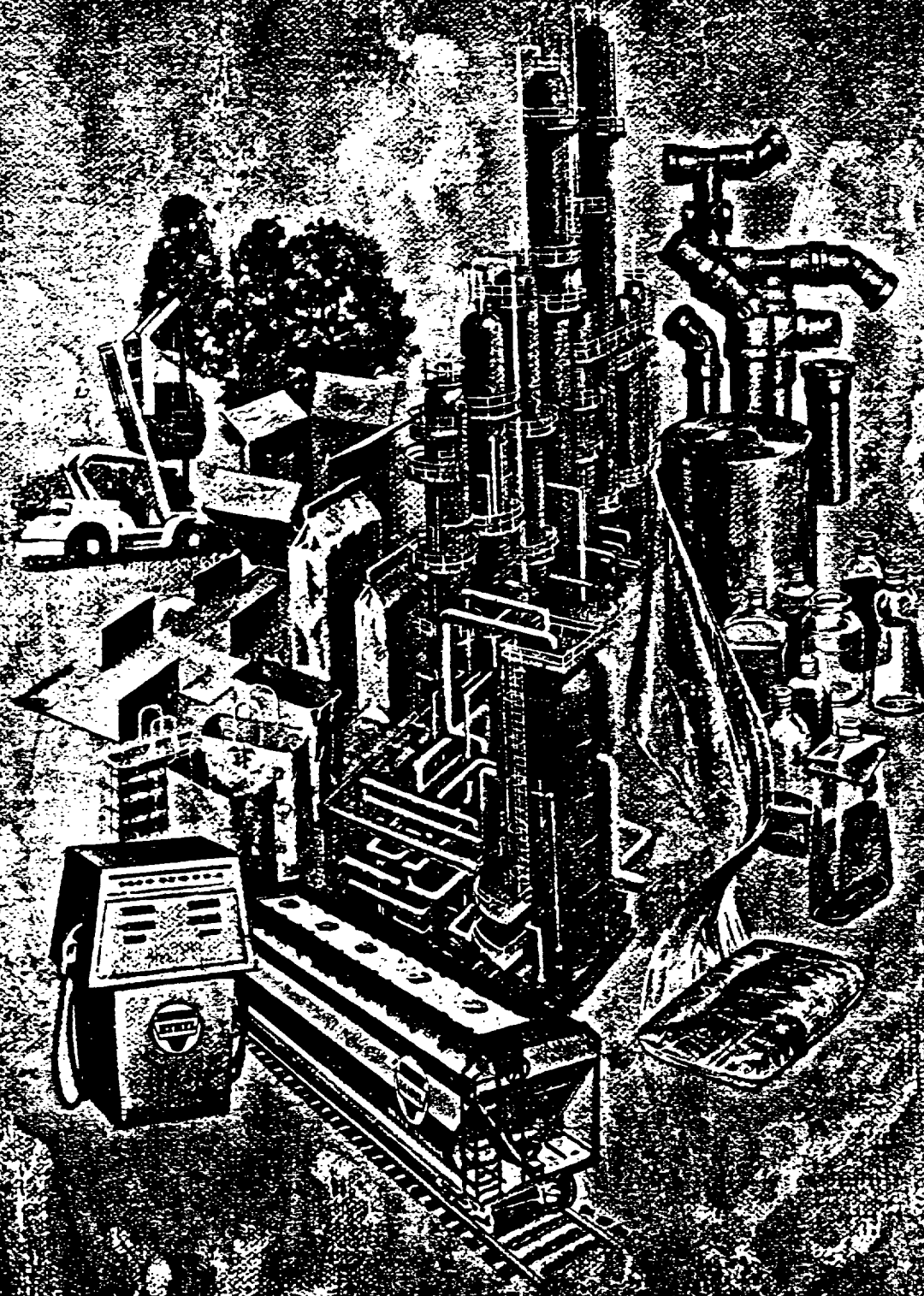
CHARLES K. WATTERS
Vice President
General Sales Manager

Ethyl's products—in the fields of petroleum additives, paper, plastics and industrial chemicals—find a multitude of uses in transportation, industry, agriculture, and in everyday life.

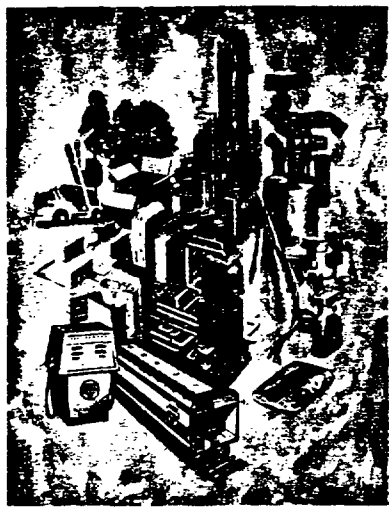


ETC 16953

Ethyl Corporation 1966 Annual Report



ETC 16954



...is an artist's
reception of some of the many
diverse products and facilities comprising
the operations of Ethyl Corporation.
The cover is Albemarle Cast Coat,
produced by Albemarle Paper Co.

ETC 16955

Ethyl Corporation 1966 Annual Report

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ANNUAL MEETING

The annual meeting of
Ethyl Corporation shareholders
will be held at the Company's executive
offices in Richmond, Va.
on Thursday, April 20, 1967

STOCK TRANSFER AGENTS

First and Merchants National Bank, Richmond, Va.
Chase Manhattan Bank, New York, N.Y.

REGISTRARS OF STOCK

The Bank of Virginia, Richmond, Va.
Morgan Guaranty Trust Co., New York, N.Y.

GENERAL COUNSEL

Hunton, Williams, Gay, Powell & Gibson,
Richmond, Va.

EXECUTIVE OFFICES

330 South Fourth Street, Richmond, Va. 23219
100 Park Avenue, New York, N.Y. 10017
Louisiana National Bank Building,
Baton Rouge, La. 70821

THE YEAR IN BRIEF

- Sales and Earnings set new records for third successive year*
- Record Capital Expenditures in 1966 bring four-year total to approximately \$145 million*
- New Greek Plant scheduled to begin operations early in 1967*
- Increased gasoline consumption paces Petroleum Chemicals growth*
- Bonnell acquisition marks company's entrance into aluminum extrusion field*
- Expansion programs in Vinyl Chloride Monomer and Polyvinyl Chloride completed*
- New Oxychlorination Plant and other industrial chemical facilities completed*
- New Chlorinated Solvents facilities to be completed early in 1967*
- Expansion and improvement of Paper Operations continue*

FINANCIAL HIGHLIGHTS

	Years Ended December 31	
	1966	1965
Net Sales	\$384,177,640	\$305,011,163
Taxes on Income	19,596,000	17,078,000
Net Income	29,168,339	24,291,926
Cash Flow	52,463,097	44,905,297
Net Income Per Share of Common Stock	\$3.00 ⁽¹⁾	\$2.53 ⁽²⁾
Cash Dividends		
Preferred Stock	585,496	239,309
Common Stock	5,476,933	4,269,106
Earnings Retained in Business	23,105,910	19,783,511
Depreciation, Depletion and Amortization	22,077,448	19,357,087
Capital Expenditures	53,278,000	52,050,000
Total Assets	382,156,228	337,323,359
Working Capital	77,936,863	69,573,891
Book Value per Share of Common Stock	\$12.63	\$10.22

⁽¹⁾ Based on 9,538,555 shares outstanding on December 31, 1966.

⁽²⁾ Based on 9,487,380 shares outstanding on December 31, 1965 adjusted for 12,000 shares issued in 1965 upon exercise of warrants.

Message to Shareholders



*The executive committee
of Ethyl Corporation at one of
its regular meetings.*

TO THE SHAREHOLDERS OF ETHYL CORPORATION:

Substantial progress on a broad front was achieved in 1966. Sales and earnings set new records for the third consecutive year. Capital expenditures were also the highest in the Company's history.

Consolidated net sales increased to \$384,178,000 in 1966, for a gain of 26% over sales of \$305,011,000 in 1965. Net income reached a level of \$29,168,000 in 1966, which was 20.1% higher than the \$24,292,000 earned in 1965. The net income was equal to \$3.00 a share on the 9,538,655 shares of common stock outstanding on December 31, 1966, as compared with earnings of \$2.53 a share in 1965 adjusted to a comparable basis.

Sales in 1966 scored the greatest year-to-year gain in the Company's history, and net income the second highest rate of growth.

While all major product lines—petroleum chemicals, plastics, industrial chemicals, and paper—contributed to the higher sales total in 1966, industrial chemicals and plastics scored the greatest percentage increases. The Company's sales were also aided by the acquisition of the William L. Bonnell Co., a leading aluminum extruder, which added nearly \$26 million in sales for the last nine months of 1966. These newer fields for the Company—plastics, industrial chemicals, and aluminum products—accounted for more than a fourth of total sales in 1966, and major expansions in each of these areas are being planned.

Capital expenditures for new facilities and equipment in 1966 amounted to over \$53 million. This brought the Company's four-year total to approximately \$145 million.



In October, Ethyl's board of directors held its regular monthly meeting for the first time at the Baton Rouge plant. A number of directors used the occasion to tour the plant and observe its newly completed facilities.

Construction projects in 1966 included an expansion and improvement of facilities for antiknock compounds and chemical intermediates; expansion in the Company's vinyl chloride monomer capacity and in the new polyvinyl chloride resins and compounds plant; a new oxychlorination plant at Baton Rouge which will be a key factor in the chlorinated hydrocarbon complex there; and facilities for the production of perchlorethylene and trichlorethylene, two of the leading chlorinated solvents in use.

A number of these projects were subject to construction delays during the year, but at year's end, the majority were either completed or in the final stages of completion.

The Paper Division also completed a major expansion and modernization program at its various plants and mills in 1966, and began the construction of another corrugated container plant.

The 1966 construction program included a new antiknock compound manufacturing plant in Greece. The plant, which is beginning operations early in 1967, is the first of its kind to be built in southeastern Europe, and it will supply refiners in Europe, the Middle East and Africa. The plant also will produce and sell vinyl chloride monomer.

To serve the growing gasoline markets overseas, the International Division added new storage and distribution terminals for antiknocks in Europe and Latin America, and expanded its services to refiners.

Problems of air pollution received continued attention from legislative bodies and the general public in 1966, and the Company followed closely developments relating to the regulation and control of certain automobile exhaust emissions. Antiknock compounds have come under close scrutiny in recent years because they are a component of gasoline and hence of motor vehicle exhaust, but to date their use has not been subject to legislative restriction. Additional research and governmental examination of the possible effects of antiknock compounds upon the public health can be expected in the future, but the Company will continue to maintain, on the basis of data accumulated over 40 years of medical and scientific research, that antiknock compounds are not a significant factor in air pollution and do not constitute a public health hazard.

As a result of its many years of comprehensive research into fuels, engines and the internal combustion process, the Company has developed substantial know-how which we believe will be an important asset in the continuing efforts of industry to control air pollution. In this connection, the Company is doing significant research and development work on new devices and compounds which, it is believed, are of potential value in reducing air pollution from industrial sources as well as automobile emissions. In addition, it is undertaking the marketing of a plastic aerating and filtering medium for treating sewage and industrial wastes, thereby aiding in the attack on water pollution. Ethyl intends to continue and to enlarge its activities in developing products to control air and water pollution in view of their national importance. These activities are a natural adjunct to Ethyl's established areas of interest.

The continuing support of our employees, stockholders, customers and suppliers helped make possible our progress thus far, and gives us great assurance for the future.

George F. Kirby

GEORGE F. KIRBY
President

F. D. Gottwald

FLOYD D. GOTTWALD
Chairman of the Board

Financial Review

SALES AND NET INCOME Record sales and earnings were achieved in 1966 for the third consecutive year.

Consolidated net sales reached a level of \$384,177,640 in 1966, which was \$79,166,477, or 26%, higher than the sales of \$305,011,163 for 1965. The sales increase, the largest annual increment in the Company's history, was due to the acquisition on April 1 of the William L. Bonnell Co., an aluminum extruder, and to gains in all of the Company's major product lines.

The addition of Bonnell sales for the last nine months of 1966 accounted for nearly a third of the over-all sales increase. Of the Company's major product lines, sales of petroleum chemicals contributed the largest dollar increase, followed by paper and paper products, industrial chemicals, and plastics, in that order. The increase in petroleum chemicals sales included sales gains by Ethyl of Canada and the International Division as well as the domestic sales organization.

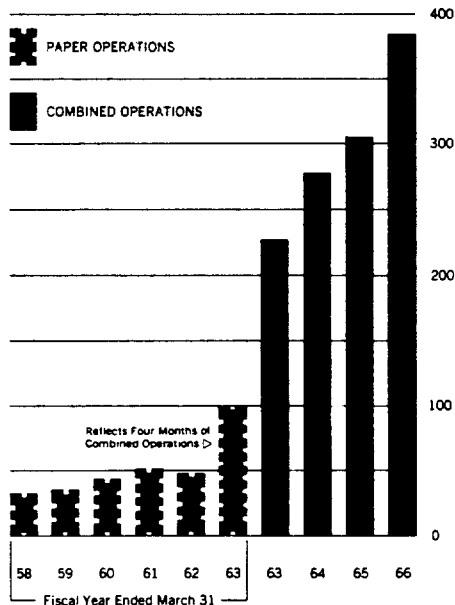
As part of the over-all increase in sales, substantial progress has been achieved in diversifying the Company's operations. Thus, while sales of petroleum chemicals continued to increase in 1966, gains in other product lines had the effect of lowering petroleum chemicals' percentage of total sales from 62% in 1965 to 55% in 1966. Meanwhile, industrial chemicals and plastics accounted for 10% each of total sales, paper and paper products accounted for 18%, and nine months' sales of aluminum extrusions by the William L. Bonnell Co. accounted for 7% of the total.

Details of these sales breakdowns are shown in the accompanying table.

NET SALES

YEARS ENDED DECEMBER 31

MILLIONS OF DOLLARS



NET SALES BY PRODUCT LINES—1964-1966 (IN THOUSANDS OF DOLLARS)

	1966		1965		1964	
	Net Sales	Percentage of Total	Net Sales	Percentage of Total	Net Sales	Percentage of Total
Petroleum Chemicals	\$213,112	55%	\$189,504	62%	\$173,001	62%
Industrial Chemicals	40,009	10	29,855	10	25,389	9
Plastics	37,702	10	29,955	10	28,856	11
Paper and Paper Products	67,433	18	55,697	18	50,232	18
Aluminum Products	25,922	7	—	—	—	—
	\$384,178	100%	\$305,011	100%	\$277,478	100%

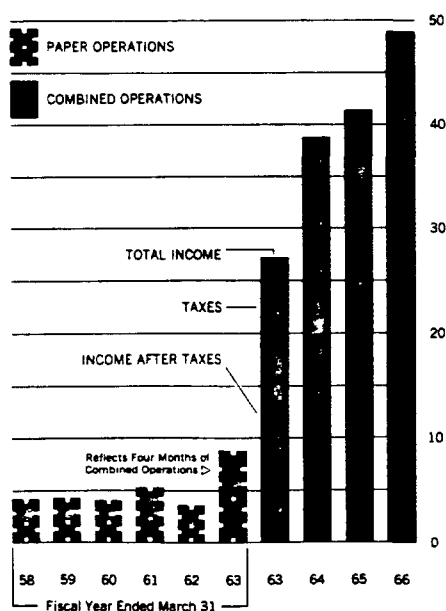
Net income for 1966 rose to \$29,168,339, which represented an increase of \$4,876,413, or 20.1%, over the net income of \$24,291,926 for 1965. The net income in 1966 was equal to a 7.6% return on sales as compared with an 8% return on sales for 1965.

The 1966 net income was equal to \$3.00 a share on the 9,538,655 shares of common stock outstanding on December 31, 1966. It compared with a net income of \$2.53 a share for 1965, on the basis of 9,487,380 shares outstanding on December 31, 1965, adjusted for the exercise of warrants for 12,000 shares during 1966.

The increase in 1966 net income over 1965 is attributable principally to higher sales and generally firmer prices. Due, however, to heavy plant start-up costs, the gain in 1966 net income was less than it otherwise would have been. These costs, which apply to various new facilities, including the synthetic alcohols plant,

NET INCOME AND TAXES

YEARS ENDED DECEMBER 31 MILLIONS OF DOLLARS



amounted to approximately \$9,000,000 before tax and to \$4,680,000 after tax. On the other hand, net income in 1966 was aided by an investment credit of \$2,738,000 as compared with an investment credit of \$2,350,000 in 1965. The investment credit was applied to a reduction of Federal income taxes.

Interest costs in 1966 amounted to \$10,642,000 as compared with interest costs of \$11,004,000 in 1965.

During 1966, 51,275 shares of common stock were issued as the result of the exercise of warrants for 12,000 shares and of employee stock options for 39,275 shares. This brought the total number of common shares outstanding to 9,538,655 on December 31, 1966.

Common stock dividends paid during 1966 were at the rate of 12½ cents a share quarterly for the January 1 and April 1 dividends. This rate was increased to 15 cents a share quarterly, beginning with the July 1 dividend, and brought total dividend payments to 55 cents a share in 1966. With the July 1 increase, dividend payments were thus increased to an annual rate of 60 cents a share as compared with 50 cents a share formerly.

In April 1966, in connection with the acquisition of the William L. Bonnell Co., an issue of \$10 million 5% Cumulative First Preferred Stock was sold to a small group of private investors. Under the terms of the stock issue, sinking fund payments of \$2 million per year are to be made, beginning with June 30, 1967, for the redemption of this stock.

SOURCE AND DISPOSITION OF FUNDS The following table shows the source of funds and the disposition of funds for the year 1966:

SOURCE OF FUNDS:

Net Income	\$29,168,339
Depreciation, Depletion and Amortization	22,077,448
Deferred Income Tax	1,217,310
Proceeds from Sale of Preferred Stock	10,000,000
Proceeds from the Exercise of Warrants and Employees' Stock Options	443,856
	<u>\$62,906,953</u>

DISPOSITION OF FUNDS:

Cash Dividends	\$ 6,062,429
Capital Expenditures: Property, Plants and Equipment	45,178,000
Balance of Purchase Price of the William L. Bonnell Co. due (total purchase price: \$10,500,000)	8,100,000
Net Decrease in Long-Term Debt	572,881
Increase in Working Capital and Other Items	2,993,643
	<u>\$62,906,953</u>

Cash Flow, which consists of Net Income plus Depreciation, Depletion and Amortization and Deferred Income Taxes, amounted to \$52,463,097 in 1966, and compared with a cash flow of \$44,905,297 in 1965. The 1966 cash flow was sufficient to provide for cash dividends and debt payments in 1966, and to provide substantial funds for capital expenditures.

At December 31, 1966, working capital was \$77,936,863, and the ratio of current assets to current liabilities was 2.64 to 1. This compared with working capital of \$69,573,891 and a ratio of 2.90 to 1 at December 31, 1965.

CAPITAL EXPENDITURES Capital expenditures during 1966, including the Bonnell acquisition, totaled

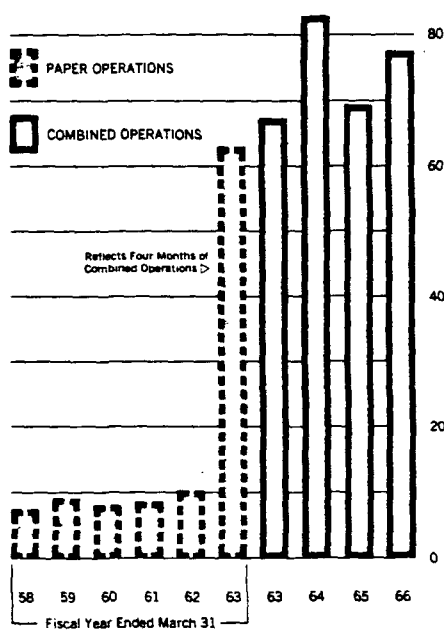
\$53,278,000. This brought total capital expenditures for the past four years to \$144,799,000. The principal expenditures included in the 1966 total were for new plants, for expansion and modernization of existing facilities, and for timberlands.

The major projects in this program, some of which were completed in 1966, are listed in the following table:

WORKING CAPITAL

YEARS ENDED DECEMBER 31

MILLIONS OF DOLLARS



PROJECT

COMPLETION DATE

Polyvinyl Chloride Resins and Compounds Plant, Baton Rouge, La.	Completed
Antiknock Compound and Chemicals Plant, Thessaloniki, Greece	Early 1967
Modernization and Expansion of Pulp and Paper Mill, Roanoke Rapids, N.C.	Completed
Expansion of Vinyl Chloride Monomer Facilities, Baton Rouge, La.	Completed
Acquisition of William L. Bonnell Co., Inc., Newnan, Ga.	Purchase Completed April 1, 1966
Perchloroethylene and Trichloroethylene Facilities, Baton Rouge, La.	Early 1967
Expansion of Antiknock Compound Facilities, Baton Rouge, La.	Completed
Acquisition of Timberlands	Completed
Estimated Total Cost	\$63 Million

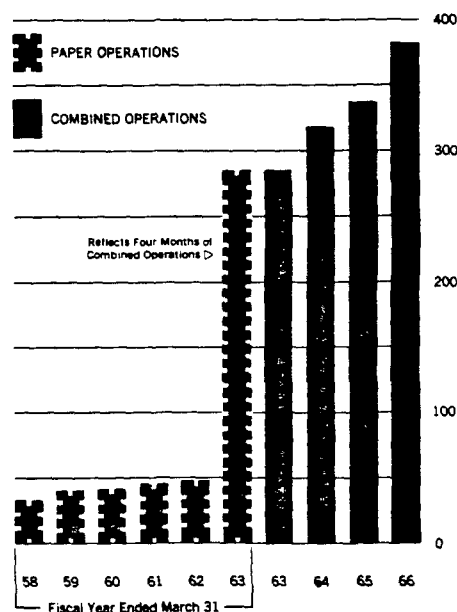
LONG TERM DEBT Debt repayments totaling \$3,476,211 were made during 1966. These consisted of payments of \$750,000 on the 5½% Bank Loan, due 1970; \$685,211 on the 3¾% Guaranteed Notes, due 1970; \$1,000,000 on the 5¾% Subordinated Notes, due 1972; and \$1,041,000 on subsidiaries' debts.

A total of \$27,431,753 in long-term debt has been paid since the Ethyl-Albemarle merger in November 1962. As of December 31, 1966, the long-term portion of the debt stood at \$181,260,000, which was equal to 57% of the Company's total capitalization.

TOTAL ASSETS

YEARS ENDED DECEMBER 31

MILLIONS OF DOLLARS



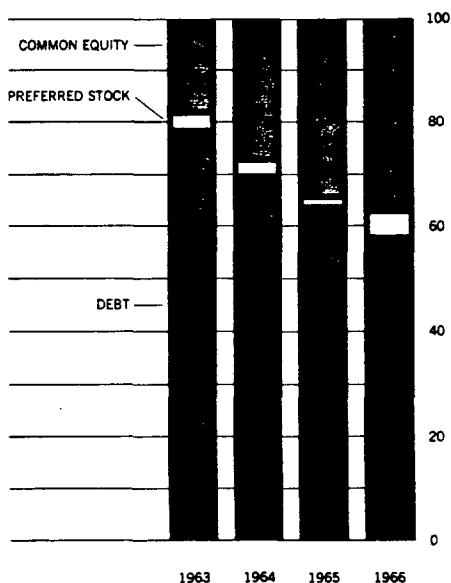
To finance the acquisition of timberlands in 1966, the Company borrowed approximately \$2,750,000 in long-term and \$2,250,000 in short-term notes, which are covered by a long-term commitment for funds in 1967.

The elements of the Company's long-term debt and the amounts falling due in future years are shown in the accompanying tables, "Summary of Long-Term Debt" and "Summary of Debt Maturities."

CAPITALIZATION RATIOS

1963-1966

PERCENT



SUMMARY OF LONG-TERM DEBT

5½% Bank Loan—Due 1967-1970	\$ 6,250,000
The Chase Manhattan Bank	
5¾% Senior Notes—Due 1971-1978	106,000,000
The Prudential Insurance Company of America	
The Equitable Life Assurance Society of the United States	
The Northwestern Mutual Life Insurance Company	
New York Life Insurance Company	
3¾% Guaranteed Notes—Due 1967-1970	2,744,321
Three Canadian Banks	
(Debt of Canadian subsidiary guaranteed by parent company)	
5¾% Subordinated Notes—Due 1967-1972	14,985,000
The Prudential Insurance Company of America	
The Equitable Life Assurance Society of the United States	
New York Life Insurance Company	
5¾% Subordinated Notes—Due 1979-1982	50,000,000
Various Institutional Investors	
Miscellaneous	5,893,325
Total Debt at December 31, 1966	
\$185,872,646	
Current Portion of Debt	
4,612,646	
Long-Term Debt	
\$181,260,000	

SUMMARY OF DEBT MATURITIES

	5½% Bank Loan Due 1970	5¾% Senior Notes Due 1978	3¾% Guaranteed Notes Due 1970	5¾% Subordinated Notes Due 1972	Miscellaneous Debt Various Maturities to 1981	Total Annual Amount
1967	\$ 750,000	—	\$685,211	\$2,500,000	\$677,435	\$ 4,612,646
1968	1,250,000	—	685,211	2,500,000	677,435	5,112,646
1969	1,250,000	—	685,211	2,500,000	613,350	5,048,561
1970	3,000,000	—	688,688	2,500,000	497,500	6,686,188
1971	—	\$12,000,000	—	2,500,000	514,500	15,014,500
1972	—	12,000,000	—	2,485,000	498,500	14,983,500
1973	—	12,000,000	—	—	498,500	12,498,500
1974	—	12,000,000	—	—	214,500	12,214,500
1975	—	12,000,000	—	—	214,500	12,214,500
1976	—	12,000,000	—	—	124,500	12,124,500
1977	—	12,000,000	—	—	124,500	12,124,500
1978	—	22,000,000	—	—	124,500	22,124,500

5¾% Subordinated Notes Due 1982 are payable in years 1979-1982.

OPERATIONS REVIEW

Petroleum Chemicals

The Petroleum Chemicals Division enjoyed a banner year in 1966. Aided by increasing gasoline demand, sales of antiknock compounds increased substantially, with the lighter lead alkyls showing particular strength. Ethyl's full range of antiknocks helps refiners to produce the most efficient gasolines with superior road performance for today's varied driving needs.

To meet the octane requirements of the motoring public, Ethyl in 1966 modernized and enlarged its antiknock manufacturing capability, and further expansion projects are planned for 1967.

Sales of other petroleum chemicals also increased substantially in 1966.

Among them is "Ethyl" Multi-Purpose Additive for gasoline—a combination carburetor detergent, de-icer, and anti-corrosion agent. Since its introduction some years ago, MPA has become the leading such additive in use.

A second product, "Ethyl" Multi-Purpose Additive-Diesel, keeps fuel injectors clean, protects engine parts against rust and corrosion, and lowers maintenance costs. MPA-D has helped a trend toward premium diesel fuel in the oil industry. As a result, its sales increased sharply in 1966, and further rapid growth is anticipated.

A third product, "Ethyl" Combustion Improver 2, has been developed for use in distillate fuels, where it improves the efficiency of combustion. Highlights of 1966 include a government contract for

its use by the military and the successful completion of a two-year test of the additive by a major public utility.

Among its many services to refiners, the Petroleum Chemicals Division pioneered the automation of gasoline knock testing, beginning with the Push Button Octane Number unit.

A significant milestone in its use was reached in 1966, when the 100th PBON unit was installed in an oil company laboratory.

This earlier work led to the development of the "Ethyl" Octane Analyzer for automatically monitoring and controlling the octane number of gasoline in the refinery. The "Ethyl" Octane Analyzer was demonstrated throughout the oil industry in 1966. Its proved reliability, ease of operation, and accuracy have attracted many customers to order this cost saving device.

A fleet of specially-designed railroad tank cars is used for the shipment of "Ethyl" antiknock compounds.



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OPERATIONS REVIEW

Industrial Chemicals

Unprecedented demand for many of its products highlighted the activities of the Industrial Chemicals Division in 1966, and its sales increased approximately a third over 1965.

One of the Division's leading products is vinyl chloride monomer, the chemical starting point for polyvinyl chloride plastics. Ethyl is one of the largest merchant producers of vinyl chloride monomer, and to meet the steadily growing demand, completed two successive expansions in capacity, at Houston and Baton Rouge, in 1965 and 1966. In addition, Ethyl in 1966 put on stream at Baton Rouge an oxychlorination plant which will substantially improve the efficiency of its vinyl chloride operations.

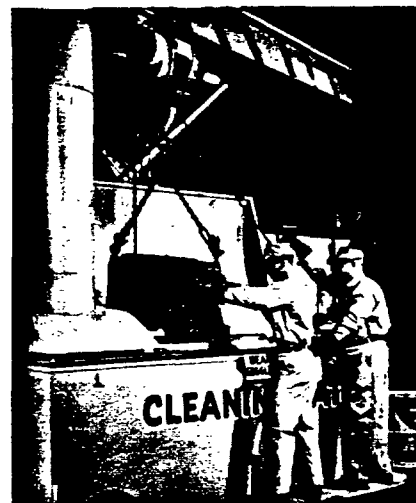
Other chlorinated hydrocarbons produced by Ethyl include ethyl chloride, ethylene dichloride, and methyl chloride. We are one of the largest producers of methyl chloride, which is used in the manufacture of antiknock compounds as well as in silicones, synthetic rubber, and other industrial applications. An expansion in capacity was completed in 1966, to serve the growing market.

Another growing industrial chemicals field is chlorinated solvents, which are used primarily for metal degreasing and dry cleaning. Demand for these products in 1966 was particularly strong, partly as a result of Vietnam war requirements, and supply shortages were felt during the year.

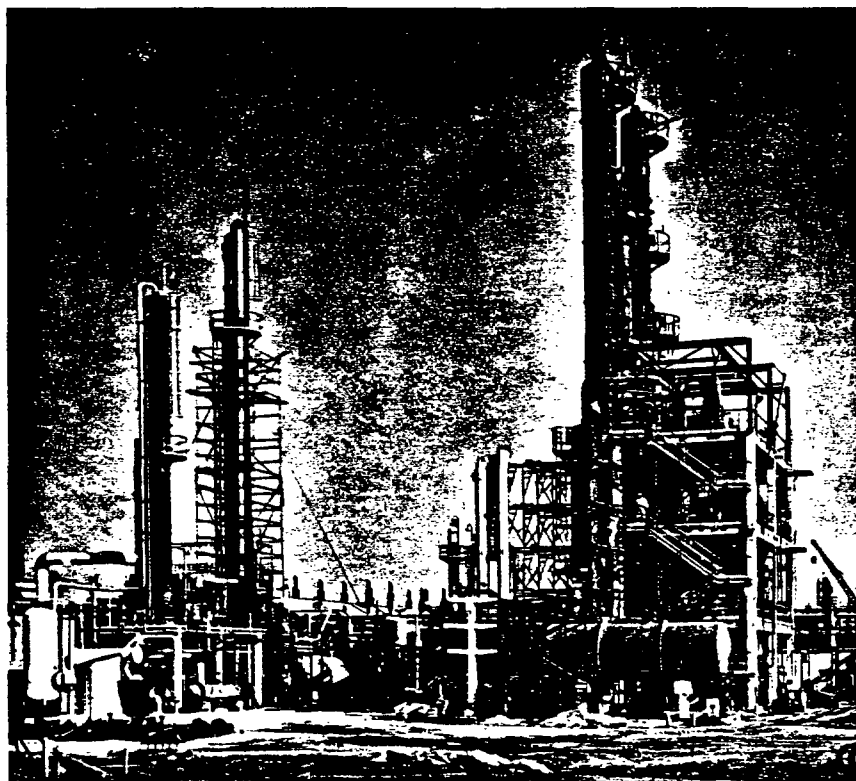
Ethyl has been marketing chlorinated solvents since 1964, and has developed an effective sales position in three leading solvents—1,1,1-trichloroethane, trichlorethylene, and perchlorethylene. A plant to produce 1,1,1-trichloroethane has been in operation since 1965, and facilities for tri- and perchlorethylene are scheduled to be completed early in 1967.

Ethyl's new synthetic alcohols plant at Houston was in operation during 1966, although, as is to be expected, many start-up problems were encountered in a plant of this size and complexity. Numerous improvements in the plant's through-put and efficiency were accomplished during the year, and continuing emphasis is being applied to realize its design productivity and efficiency.

In addition to synthetic alcohols, the plant also produces aluminum alkyls which are used as polymerization catalysts and aluminum sulfate which has a number of industrial uses. The addition of the Houston capacity has enabled Ethyl to strengthen its position as the world's largest producer of aluminum alkyls, and enabled it to share in this rapidly growing market.



Chlorinated solvents are widely used in metal cleaning and degreasing operations.



Some of the industrial chemicals facilities at the Baton Rouge plant.

OPERATIONS REVIEW

Plastics

The Plastics Division in 1966 increased its sales by more than one-fourth over 1965, strengthened its position as the leading producer of polyethylene films, and increased its participation in the polyvinyl chloride field.

Polyethylene film sales continued to grow, and the VisQueen Division increased its market share. Continuing technical improvements in film properties led to the development of new films for the more sophisticated markets.

The new LaGrange, Ga., plant, on stream in 1966, produced good quality film at satisfactory cost levels. An expansion in capacity is presently underway.

Increased film capacity was realized at the other three VisQueen plants as a result of process improvements. These and other manufacturing economies increased productivity at all three plants.

In the product area, improvement of laminate films continued, and a new product with greater toughness was introduced. Another new product is a reinforced film having strong tear resistance,

with a large potential use in construction.

Another relatively new line of products is PVC films for packaging red meat and produce. With the development phase completed, emphasis is shifting to the marketing of these superior films.

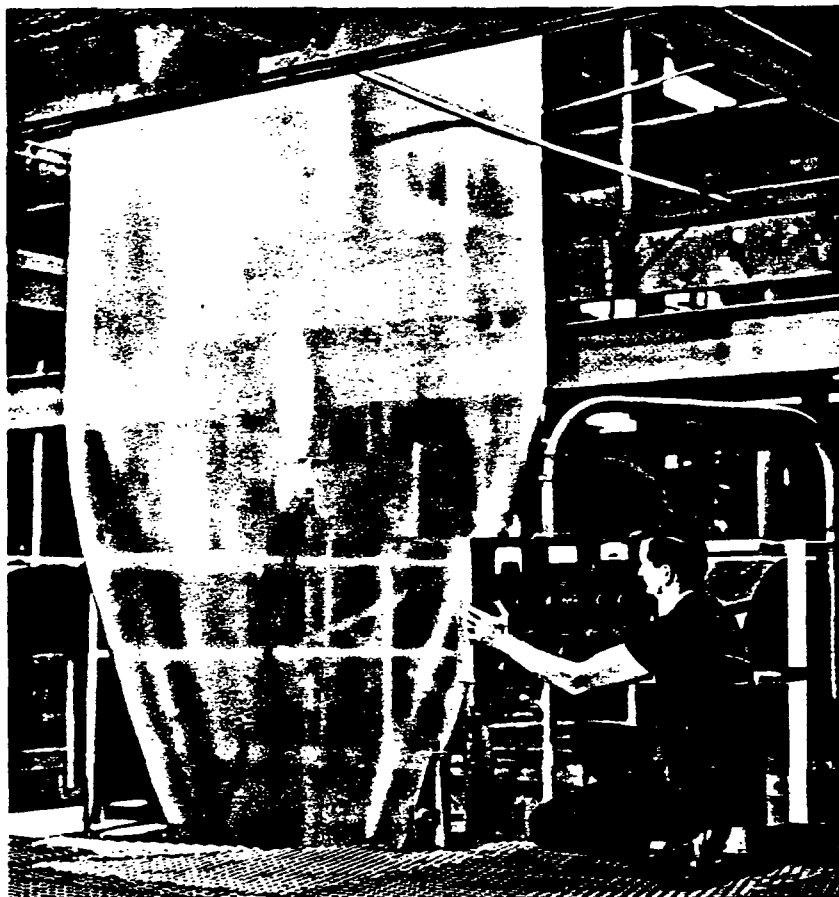
Production and sales of PVC pipe increased significantly in 1966. PVC pipe has been well received in the construction trades, and its sales were spurred by VisQueen's Bell-Ring pipe joint, which insures ease of installation and positive sealing. More PVC pipe capacity is being constructed.

The Polymer Division's new PVC resins and compounds plant was in operation during 1966, although it experienced construction delays and start-up problems. Nevertheless, the Division's resins and compounds achieved industry recognition as superior products, and a substantial increase in production and sales is anticipated for 1967.

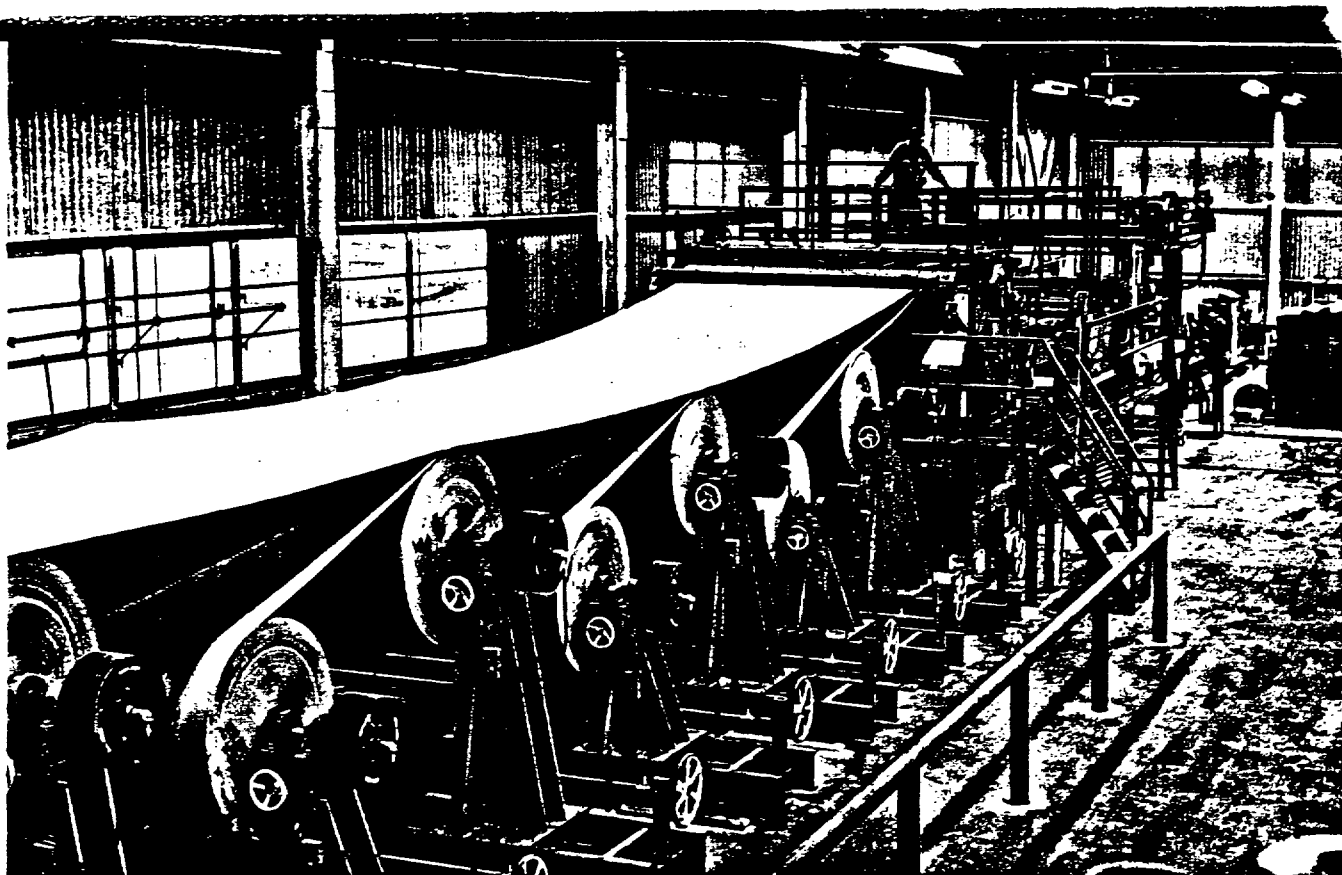
Vypak Corporation, formed jointly by Ethyl and Solvay et Cie. in 1964, is developing rigid PVC plastic bottles for various consumer products. Early in 1967, Ethyl acquired Solvay's 50% interest in Vypak, making it a wholly owned Ethyl enterprise. A broad expansion in Vypak's operations is planned.



At a VisQueen plant, a shipment of polyethylene film is packaged for delivery.



Newly-formed polyethylene film as it emerges from an extruder at a VisQueen plant.



This high-speed sheeter at the Roanoke Rapids mill cuts rolls of paper into desired sizes and lengths.

OPERATIONS REVIEW

Paper

Albemarle Paper Co. and its divisions achieved new records in sales and earnings in 1966, and its kraft paper operations were at capacity levels.

Demand exceeded capacity in several major kraft paper grades, and order backlogs were high throughout the year. Price increases in several kraft grades, as well as in absorbent paper and container board, also contributed to the improved results.

To meet the increasing market demands, a major modernization program was completed at the Roanoke Rapids pulp and paper mill in 1966. This resulted not only in substantial increases in production and plant efficiency and a reduction in operating costs, but also in important gains in product quality and a broader product line in both kraft paper and linerboard.

The Paper Division acquired approximately 41,000 acres of timberland in 1966, the largest annual acquisition of timberland in its history.

Albemarle Container Division substantially increased its output of corrugated

containers in 1966. The Division has projects under way which will result in production of a wider range of container styles at both the Odenton, Md., and Richmond plants. The Division's third container plant, near Lexington, N. C., is nearing completion.

The Raymond Bag Division also increased its sales in 1966, particularly as a result of its sophisticated plastic-paper combination shipping sacks. Raymond now produces over twice as many plastic-paper bags as the traditional multiwall paper bags.

Raymond in the last few years developed and patented its revolutionary plastic-paper combination shipping bag under the registered trademark, "Multibag."

Raymond currently is in the process of licensing other multiwall bag producers to manufacture the "Multibag."

The Consumer Bag & Packaging Co. Division, acquired in 1965, enjoyed a good market for its products, which consist of grocery bags and sacks. A major expansion program was initiated in 1966.

The Interstate Bag Co. Division experienced a strong demand for its handle shopping bags, which are finding increasing use as an advertising medium.

Interstate is installing new production capacity in 1967, and developing several new products.

Albemarle research activities were concentrated on product and process developments in 1966. A number of new kraft paper and specialty paper products were successfully commercialized, including new paper products for use in agriculture, packaging, and the automotive industry.



A comprehensive reforestation program is carried on by Albemarle Paper Co.

OPERATIONS REVIEW

International

Construction of an antiknock plant in Greece, authority for an antiknock plant in Japan, and increased sales and services in overseas markets highlighted the International Division's activities in 1966.

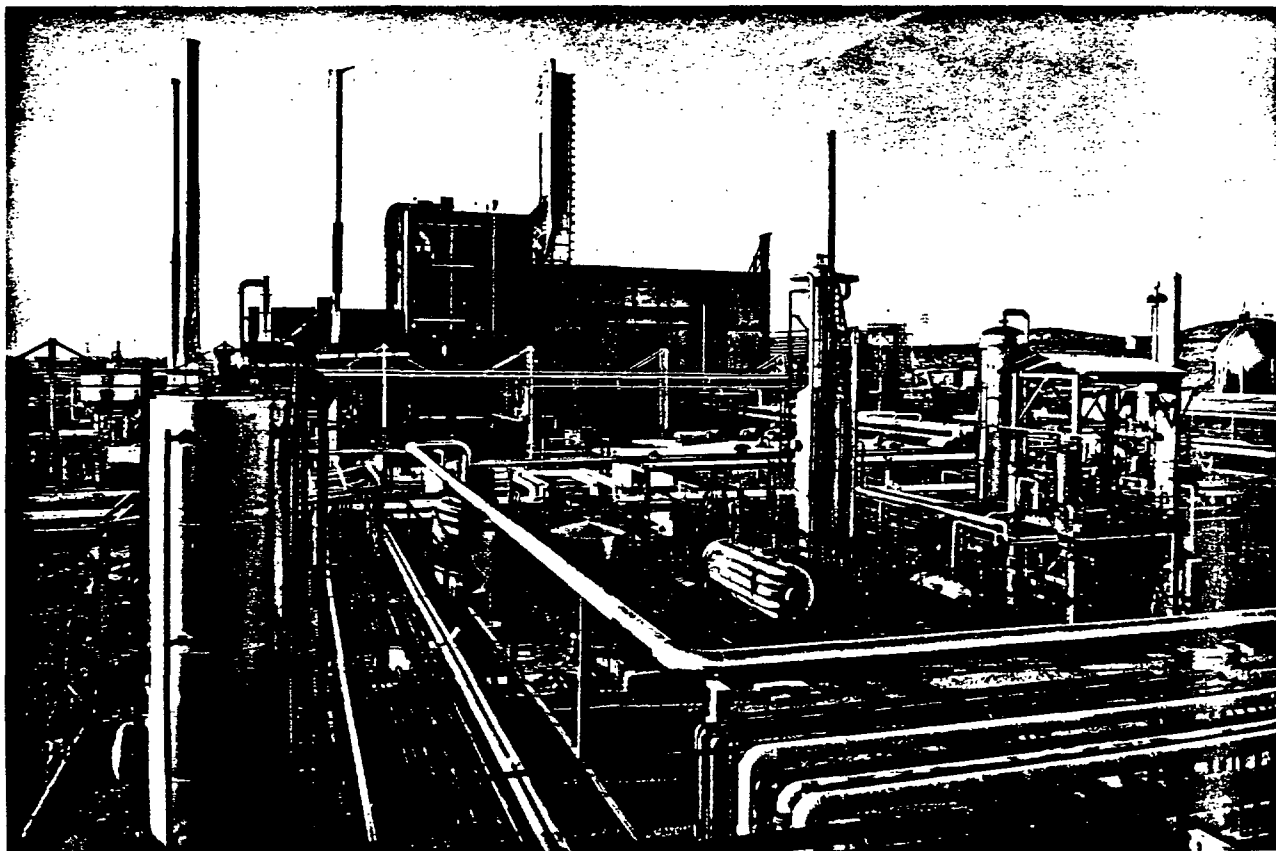
Construction of the Greek plant, situated in Thessaloniki, was essentially completed in 1966, and full operation is expected early in 1967. The plant will provide antiknock compounds to refiners throughout Europe, the Middle East and Africa. It will also produce and market

vinyl chloride monomer for conversion into polyvinyl chloride.

The Japanese Government approved formation of a joint venture to manufacture antiknock compounds in Japan for domestic consumption and export throughout the Far East. Ethyl has a 47.5% interest in the venture, and its Japanese partners are Toyo Soda, Mitsui and Co., Nomura Jimusho, and Asano Chemicals. Discussions on other joint ventures are also being conducted with certain Japanese companies. Meanwhile, the location of full-time Ethyl representatives in the Far East during 1966 was instrumental in maintaining Ethyl's sales position there.

Antiknock sales in the Ethyl S.A. marketing area (Europe, the Middle East and Africa) reached a new high in 1966. Area industrial chemical sales declined, however, due to increased European competition. A distribution terminal for antiknocks is under construction in Cadiz, Spain, and will supplement the three European terminals already in operation.

Sales and service efforts in Latin America resulted in increased sales of antiknocks, other petroleum additives, and industrial chemicals. A new Latin America terminal, the sixth, went into operation in the Virgin Islands in 1966, and a terminal in Peru is scheduled to begin operations early in 1967.



Ethyl's new plant in Thessaloniki, Greece, as it was nearing completion.

OPERATIONS REVIEW

Canada

Ethyl's Canadian subsidiary, Ethyl Corporation of Canada Limited, increased its sales of antiknock compounds and other chemicals to new record levels in 1966.

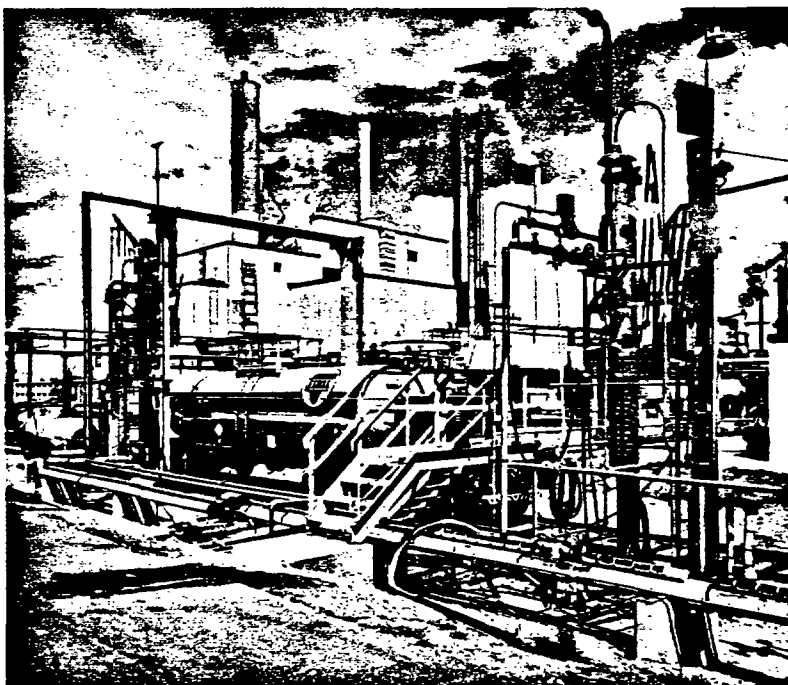
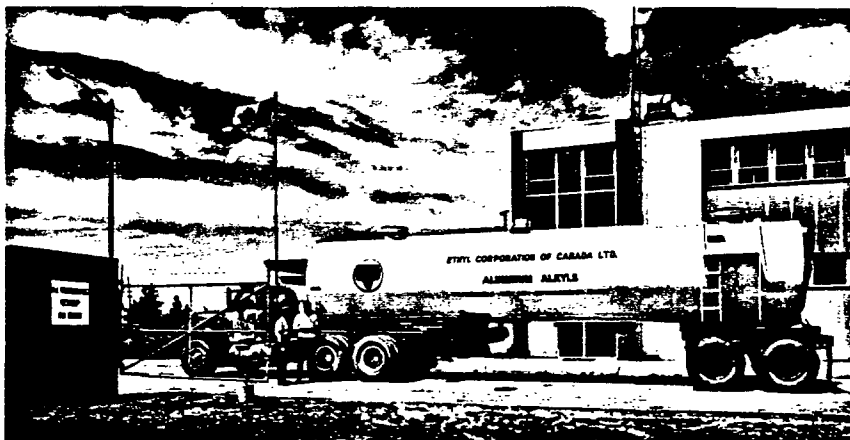
The company also became an exporter of products for the first time in 1966.

Aided by higher automobile registrations and increased gasoline demand, antiknock sales increased, despite Canadian-based competition. Moreover, the growing demand for the lighter lead alkyl antiknocks produced by Ethyl of Canada was reflected in the fact that they accounted for nearly 10% of the Company's total antiknock sales, domestic and foreign.

Sales of other petroleum additives showed an improvement over 1965, with Ethyl of Canada retaining its leadership in supplying antioxidants and detergent-deicer additives for gasoline.

Ethyl of Canada is also the sole manufacturer of aluminum alkyl compounds in the country, and supplies all consumers in the synthetic rubber and plastics industries with these widely used catalysts. The company also made its first export shipment of aluminum alkyls in 1966.

For 1967, Ethyl of Canada looks for continuing gains in the production and sales of its petroleum additives and industrial chemicals.



Top, a shipment of aluminum alkyls leaving the Ethyl of Canada plant in Sarnia, Ontario. Above, a general view of the Sarnia plant.



One of the extrusion lines at the William L. Bonnell plant in Newnan, Ga.

OPERATIONS REVIEW

Bonnell Co.

The William L. Bonnell Co., which was acquired by Ethyl as of April 1, 1966, shared in the aluminum extrusion industry's growth, and increased its sales by about 20% over 1965.

The Bonnell Co. also completed a vigorous program of expansion and improvement in its manufacturing facilities at Newnan, Ga.

Bonnell, which is the largest independent extruder of aluminum shapes, molding and trim, primarily serves the building and construction industry. A small portion of its products also goes into consumer durable goods and transportation units.

Ordinarily, its business is sharply affected by seasonal factors in the building and construction trades, but contrary to expectations, Bonnell's operations continued at a high level throughout 1966.

While reduced construction activity, brought on by tight money conditions, is among the factors to be reckoned with in its business, Bonnell nevertheless looks forward to continuing sales and earnings gains in 1967.

As part of its expansion and improvement program, Bonnell installed its twelfth press during the year, increasing its extrusion capacity by approximately 18% and enabling it better to serve its customers in peak periods. The company also is expanding its casting facilities which will increase its billet capacity by around one-third and also minimize its dependence on open market purchases of billets.

In addition, new facilities to expedite the packaging and shipping of its products were completed during 1966.

Moreover, a great deal of effort was devoted to improving other phases of Bonnell's operations and services to its customers during 1966, and this is expected to contribute to a steadily improved performance in 1967.



Aluminum pig metal is fed to a furnace in the Bonnell plant, where it is melted down and alloyed before further processing.

OPERATIONS REVIEW

Advertising, Employee and Public Relations

EMPLOYEE RELATIONS - As the Company expands and diversifies, the importance of good employee relations becomes increasingly evident. We are very fortunate in having an excellent group of employees who have worked diligently and effectively to achieve the goals that Ethyl has established.

As of December 31, 1966, there was a total of 10,149 employees.

Of the total number of employees, approximately 6,000 were employed in the domestic chemical and plastics operations of Ethyl Corporation; around 350 in the Canadian and overseas chemical operations; approximately 2,600 in Albe-marle Paper Co. and its divisions; and about 1,350 in the William L. Bonnell Co.

Of all Ethyl locations, the Baton Rouge plant had the largest number of employees, approximately 3,000, as of December 31, 1966.

ADVERTISING - The Advertising and Sales Promotion department, as part of its responsibilities, continued the Corporate Identity advertising program in 1966. Its objective is to emphasize that Ethyl is a research-minded, diversifying corporation with a varied line of products serving many industries.

To support product sales activities, industrial advertisements appeared promoting the products and services of the Ethyl divisions.

For example, antiknock compounds received special emphasis in advertisements featuring Ethyl's experience, facilities and skills in serving its customers. Packaging film and PVC resins and compounds were advertised in trade publications reaching appropriate audiences. Other products were similarly supported.

In the sales promotion area, a variety of individual sales tools, such as printed materials, visual aids and trade show exhibits, as well as entire promotional programs, were produced to aid the sales activities of the various divisions.

PUBLIC RELATIONS - The Public Relations department conducted numerous

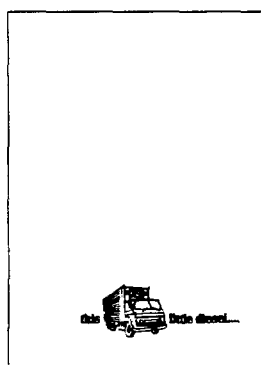
public relations programs on behalf of the Company and its individual divisions.

A substantial amount of effort was devoted to publicity supporting the introduction of new products, in order to make them known to potential customers.

Related publicity, including magazine articles, was prepared on the Company's services, particularly in technical areas, as an aid to divisional objectives.

Another area of the Department's activities consisted of information about the Company to the business and financial community, and educational materials for the public at large.

The department also assisted various company divisions in their employee recruiting efforts and other special projects.



OPERATIONS REVIEW

Research and Development

With effective research vital to its continued success, the Company pursued an aggressive research program in 1966. Expenditures on research and development were equal to about 4% of annual sales.

Ethyl continued its research program on experimental gasoline engine induction systems intended to reduce undesirable emissions in the vehicle exhaust. In addition, studies were made of other engine designs and operating variables which show promise of reducing emissions still further. The continuing objective is to reduce exhaust emissions to the lowest level consistent with satisfactory engine operation.

Research leads have been uncovered in the search for special additives to reduce emissions, and new techniques and

instrumentation have been devised to assist in our emission studies. Two contracts in the emissions area, being conducted for the U.S. Public Health Service, have broadened our knowledge in this exceedingly complex field.

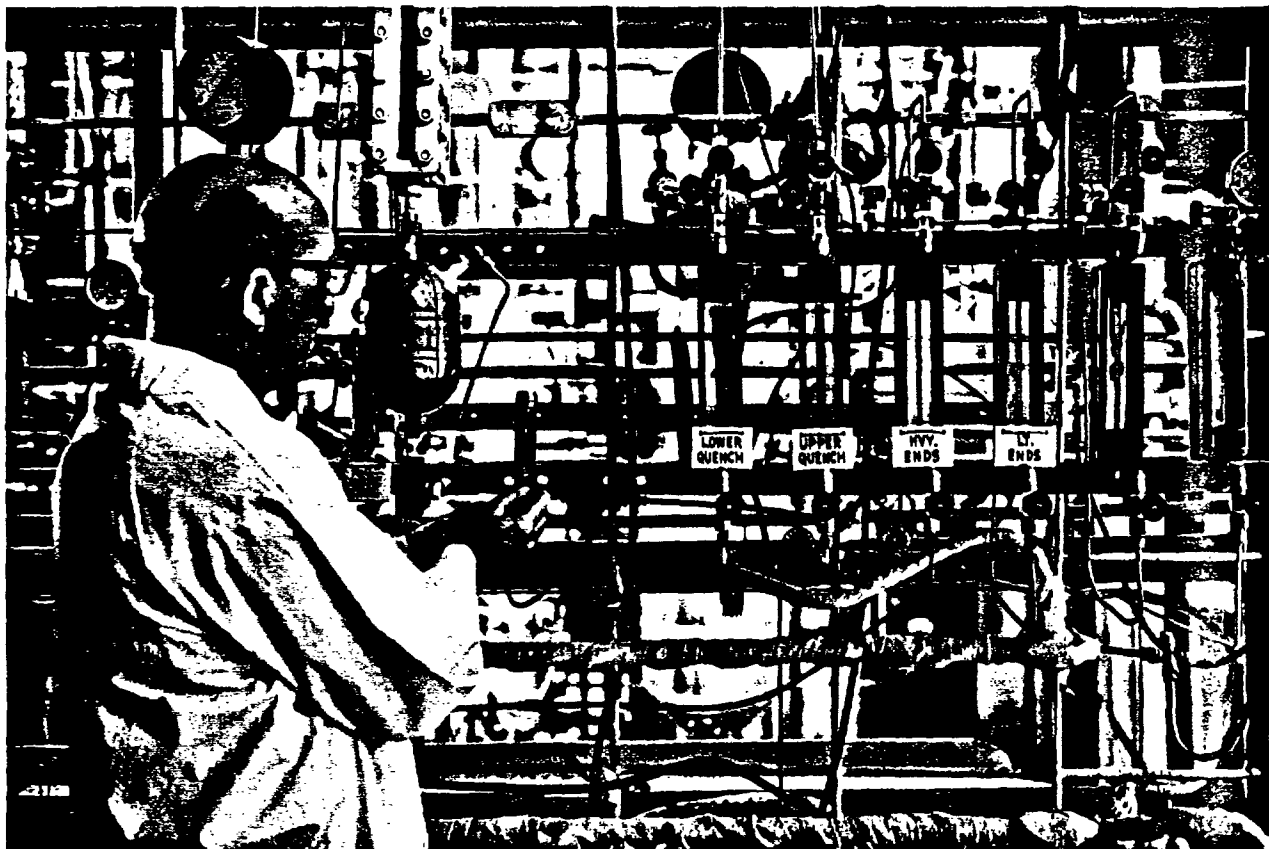
Chemical research programs in 1966 ranged from synthetic edible fats to foamed aluminum to new technology applicable to the production of lead anti-knock compounds. A new product area of high potential is represented by synthetic fatty acids applicable in the detergent and other industries. Significant progress was also made on research into soap and acid derivatives.

Accompanying Ethyl's entrance into the plastics field has been an extensive research and development program on plastics. This has included both research on polymers and on process and product improvement work in present product areas. Illustrative of the latter is the development of polyvinyl chloride compounds for such applications as plastic pipe, battery separators, bottles, shoe soles, and wire coating.

Research projects were also carried

out for the Department of Defense. The results of this contract research are in advanced stages of testing by the military. In addition, the R & D Department in 1966 continued to supply significant amounts of chemicals used by the Department of Defense.

During 1966, Ethyl received about 100 U.S. patents and 125 foreign ones. Ethyl now holds over 1,000 unexpired U.S. patents and maintains about 800 foreign patents.



Bench-scale models play an important role in research and development programs.

OPERATIONS REVIEW

Products

Ethyl's products find a multitude of uses. They range from petroleum chemicals for use in automotive transportation to industrial chemicals and paper and plastics with innumerable everyday applications. A few of these products are shown on this page. They include PVC pipe for potable water systems, shopping bags for consumers, PVC film for packaging red meat and produce, polyethylene film for packaging bread, PVC bottles for various consumer products, and chlorinated solvents used in dry cleaning garments and in industrial cleaning operations.

The various Ethyl products are listed below:

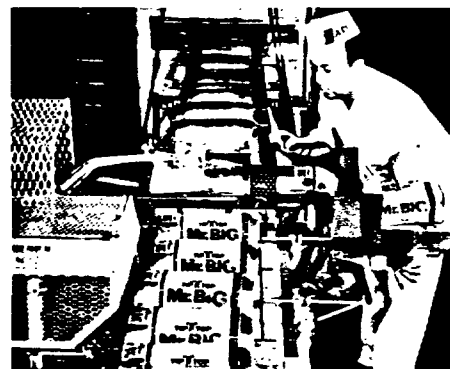
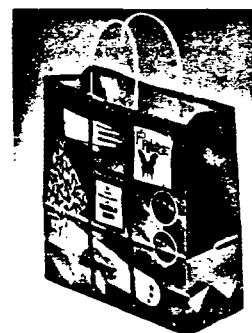
PETROLEUM CHEMICALS: GASOLINE ANTIKNOCK COMPOUNDS / GASOLINE IGNITION CONTROL COMPOUNDS / ANTIOXIDANTS / GASOLINE DETERGENT-DEICER-CORROSION INHIBITORS / DIESEL FUEL DETERGENT-DISPERSANT-CORROSION INHIBITOR / DIESEL FUEL IGNITION IMPROVER / FUEL OIL COMBUSTION IMPROVER / FURNACE OIL STABILIZER / LUBRICATING OIL ADDITIVES / METAL DEACTIVATOR / OIL SOLUBLE DYES

INDUSTRIAL CHEMICALS: VINYL CHLORIDE / ETHYL CHLORIDE / ETHYLENE DICHLORIDE / METHYL CHLORIDE / CHLORINATED SOLVENTS (PERCHLOROETHYLENE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE) / CAUSTIC SODA / SODIUM / ALUMINUM ALKYL COMPOUNDS / ORTHOALKYLATED CHEMICALS / ORTHOALKYLATED ANTIOXIDANTS / HYDROPOLYMER OIL / SYNTHETIC PRIMARY ALCOHOLS / ALUMINUM SULFATE

PLASTICS: POLYETHYLENE PACKAGING FILMS / POLYVINYL CHLORIDE PACKAGING FILMS / POLYETHYLENE BUILDING AND AGRICULTURAL FILMS / POLYETHYLENE TAPE / "TIE-EYES" / POLYVINYL CHLORIDE PIPE, CONDUIT AND FITTINGS / POLYVINYL CHLORIDE RESINS AND COMPOUNDS / POLYVINYL CHLORIDE (VYPAK) CONTAINERS

PAPER PRODUCTS: UNBLEACHED SULFATE PULP / KRAFT PAPERBOARD / KRAFT WRAPPING PAPER / COLORED KRAFT / BAG AND SACK KRAFT / SPECIALTY KRAFT PAPERS / BLOTting PAPER / GASKET PAPER / FILTER PAPERS / ASPHALT, WAX, RESIN AND SILICONE TREATED PAPERS / COATED PAPER BOARD / MULTIWALL BAGS / PLASTIC FILM BAGS / HANDLE SHOPPING BAGS / GROCERY BAGS / CORRUGATED CONTAINERS

ALUMINUM PRODUCTS: ALUMINUM SHAPES, MOLDING AND TRIM



Consolidated Balance Sheet

ASSETS

	December 31	
	1966	1965
Current assets:		
Cash	\$ 12,745,343	\$ 18,770,151
Short-term securities (approximates market) . . .	4,688,070	7,806,551
Accounts receivable	56,131,388	37,241,462
Inventories	50,387,055	41,570,190
Prepaid expenses	1,620,890	615,084
Total current assets	125,572,746	106,103,438
Property, plant and equipment	312,303,298	266,213,837
Less, Accumulated depreciation and depletion . .	86,270,827	67,310,665
Net property, plant and equipment	226,032,471	198,903,172
Investments in 50%-owned companies	5,831,460	5,640,112
Deferred charges and other assets	15,046,624	16,459,618
Patents, contracts and other intangibles	9,672,927	10,217,019
	<u>\$382,156,228</u>	<u>\$337,323,359</u>

The accompanying notes are an integral part of these statements.

LIABILITIES

	December 31	
	1966	1965
Current liabilities:		
Accounts payable and accrued expenses	\$ 32,650,000	\$ 26,683,858
Notes payable	2,250,000	—
Long-term debt, current portion	4,612,646	2,789,146
United States and foreign income taxes	8,123,237	7,056,543
Total current liabilities	47,635,883	36,529,547
Long-term debt	181,260,000	181,832,881
Estimated income taxes payable in future years ...	12,945,319	11,681,400
Provision for employee benefits	5,833,097	6,517,274
Minority interest in consolidated subsidiary	350,000	—

SHAREHOLDERS' EQUITY

Capital stock:		
6% cumulative preferred, par \$100 per share ..	3,691,200	3,803,600
5% cumulative preferred, par \$100 per share ..	10,000,000	—
Common, par \$1 per share	9,538,655	9,487,380
Capital surplus	25,465,985	25,074,528
Retained earnings	85,502,659	62,396,749
	134,198,499	100,762,257
Less, Preferred stock in treasury,		
680 shares (at cost)	66,570	—
Total shareholders' equity	134,131,929	100,762,257
	\$382,156,228	\$337,323,359

The accompanying notes are an integral part of these statements.



ETHYL CORPORATION
AND
SUBSIDIARIES

Consolidated Statement of Income and Surplus

	December 31	
STATEMENTS OF INCOME AND RETAINED EARNINGS	1966	1965
Income:		
Net sales	\$394,070,840	\$305,011,163
Miscellaneous income, net	1,859,987	3,006,775
	<u>395,930,827</u>	<u>308,017,938</u>
Costs and expenses:		
Cost of goods sold	276,704,072	212,456,499
Selling and general expenses	49,171,133	42,448,845
Interest and financing costs, long-term debt	11,357,114	11,742,668
United States and foreign income taxes	19,896,011	17,078,000
	<u>356,828,330</u>	<u>283,726,012</u>
Net income	29,102,497	24,291,926
Retained earnings at beginning of year	60,396,749	42,613,238
	<u>91,699,246</u>	<u>66,905,164</u>
Deduct, Cash dividends:		
6% Preferred stock, \$6.00 per share	239,309	239,309
5% Preferred stock, \$3.61 per share	—	—
Common stock, \$.58 per share in 1966 and \$.46 in 1965	6,478,933	4,269,106
	<u>6,718,242</u>	<u>4,508,415</u>
Retained earnings at end of year	<u>\$ 98,503,669</u>	<u>\$ 62,396,749</u>
STATEMENTS OF CAPITAL SURPLUS		
Balance at beginning of year	\$ 20,861,554	\$ 20,861,554
Excess of proceeds over par value of 12,000 and 963,000 shares of common stock issued upon exercise of warrants	43,000	3,450,750
Excess of cash received over par value of 39,275 and 85,722 shares of common stock issued under stock option plan	349,581	766,584
Excess of cost over par value of preferred stock canceled	(4,360)	(4,360)
Balance at end of year	<u>\$ 25,465,985</u>	<u>\$ 25,074,528</u>

The accompanying notes are an integral part of these statements.



ETHYL CORPORATION
AND
SUBSIDIARIES

1. **CONSOLIDATION PRINCIPLES:** The accompanying financial statements include the accounts and operations of all wholly-owned subsidiaries, including Halifax Timber Company, the operations of which were not previously consolidated and the investment in which was stated at cost in previous financial statements. The financial statements for 1965 have been restated to give effect to this change in presentation and net income for 1965 as previously reported has been increased by the amount of the net income of Halifax Timber Company for that year (\$44,403) and the accumulated retained earnings of that company as of January 1, 1965 (\$64,493).
2. **ACQUISITION:** Ethyl Corporation purchased all the outstanding common stock of The William L. Bonnell Company, Inc. on April 1, 1966. Accordingly, the accompanying financial statements include the assets and liabilities of the acquired corporation and results of its operations for the nine month period ended December 31, 1966.
3. **INVENTORIES:** Inventories include:

	1966	1965
Finished goods	\$18,557,199	\$15,089,284
Raw materials and work in process	25,156,048	21,202,821
Stores, supplies; etc.	6,673,808	5,278,085
	<u>\$50,387,055</u>	<u>\$41,570,190</u>

Inventories are stated at the lower of cost or market, with cost being determined on the last-in, first-out basis with respect to approximately \$25,822,000 at December 31, 1966 and \$26,571,000 at December 31, 1965, and generally on an average cost basis with respect to the balance.

4. **INVESTMENTS IN 50%-OWNED COMPANIES:** Investments in 50%-owned companies are stated at cost or less and represent the Corporation's investments in and advances to Ethyl-Dow Chemical Company and Vypak Corporation. The Corporation's investments exceed its equity in the net assets of those companies at December 31, 1966 by approximately \$3,352,000, representing the excess of investment over equity in net assets of Ethyl-Dow at date of acquisition (November 30, 1962) less undistributed earnings of \$100,000 since that date. Dividends received from Ethyl-Dow were \$1,825,000 in 1966 and \$1,800,000 in 1965. Such amounts were not significantly different from the Corporation's equity in Ethyl-Dow earnings. Subsequent to December 31, 1966, the Corporation acquired the other 50% interest in Vypak Corporation.

Notes to Financial Statements

Continued

5. **PROPERTY, PLANT AND EQUIPMENT:** Property, plant and equipment is stated at cost as follows:

	1966	1965
Land	\$ 14,135,981	\$ 12,811,929
Timberland and standing timber	17,924,861	11,130,505
Buildings	36,642,563	32,749,874
Machinery and equipment	243,599,893	209,521,529
	<u>\$312,303,298</u>	<u>\$266,213,837</u>

6. **DEFERRED CHARGES AND OTHER ASSETS:** Deferred charges at December 31, 1966 consist principally of unamortized discount on long-term debt and other deferred financing expenses.
7. **PATENTS, CONTRACTS AND OTHER INTANGIBLES:** Patents and contracts with an unamortized cost basis of \$3,510,741 at December 31, 1966 are being amortized over their respective lives; other intangibles are stated at cost.
8. **LONG-TERM DEBT:** Reference is made to "Long-Term Debt" on page 9 of this report for information concerning the Company's borrowings.
9. **CAPITAL STOCK:** As of December 31, 1966, there are 12,156,000 shares of common stock authorized, of which 9,538,655 shares are outstanding. As of December 31, 1966, there are 1,000,000 shares of cumulative first preferred stock, \$100 par, authorized, of which 36,912 shares of 6% Series A and 100,000 shares of 5% Series B are outstanding. The 6% Series A stock is callable at \$101 and is entitled to annual sinking fund contributions of \$114,108, and the 5% Series B stock is entitled to annual sinking fund contributions of \$2,000,000.
10. **WARRANTS:** At December 31, 1966, there are outstanding warrants exercisable on or before November 1, 1982 which entitle the holders thereof to purchase 196,800 shares of unissued common stock, \$1 par value, at \$4.58 per share. During 1966, warrants for 12,000 shares were exercised.
11. **STOCK OPTION PLAN:** Under the Corporation's restricted stock option plan, 900,000 shares of unissued common stock were reserved for issuance to officers and other key employees. At December 31, 1965, there were outstanding options to purchase 575,550 shares at prices ranging from \$9.42 to \$24.00. During the year ended December 31, 1966, options for 39,275 shares were exercised and options for 38,375 shares were cancelled, leaving outstanding at December 31, 1966 options covering 497,900 shares, of which options for 231,770 shares are exercisable at that date. There were 190,817 shares available for grant under the plan at the end of the year. An option to purchase 29,500 shares at \$33.12 per share was granted in January 1967.
12. **RETAINED EARNINGS RESTRICTION:** The Corporation's articles of incorporation and note agreements contain restrictions, among others, against the payment of cash dividends. At December 31, 1966, \$30,105,000 of retained earnings is free of such restriction under the agreement presently most restrictive.
13. **INVESTMENT CREDIT:** The Corporation's provision for United States and foreign income taxes was reduced (and net income increased) by investment credits of \$2,738,000 and \$2,350,000 in 1966 and 1965, respectively.
14. **DEPRECIATION, DEPLETION AND AMORTIZATION:** Depreciation and depletion charged to income amounted to \$19,845,641 and \$16,898,385 in 1966 and 1965, respectively. Amortization of intangibles and of deferred discount and financing expenses charged to income amounted to \$2,231,807 and \$2,458,702 in the respective years.

Auditors' Report



ETHYL CORPORATION
AND
SUBSIDIARIES

TO THE BOARD OF DIRECTORS AND SHAREHOLDERS OF ETHYL CORPORATION:

We have examined the consolidated balance sheet of ETHYL CORPORATION and SUBSIDIARIES as of December 31, 1966, and the related statements of income and retained earnings and of capital surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We previously examined and reported upon the Corporation's consolidated financial statements for the year ended December 31, 1965.

In our opinion, the aforementioned statements present fairly the consolidated financial position of Ethyl Corporation and Subsidiaries at December 31, 1966 and 1965, and the results of their operations for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Lybrand Ross Bros. & Montgomery

LYBRAND, ROSS BROS. & MONTGOMERY

New York, February 6, 1967.

Ten-Year Summary



ETHYL CORPORATION
AND
SUBSIDIARIES

	Years Ended December 31 —		
	1966	1965	1964
SALES AND INCOME			
Net sales ⁽²⁾	\$384,177,640	\$305,011,163	\$277,478,496
Income before non-cash items and income taxes	70,841,787	60,727,013	55,701,126
Depreciation, depletion and amortization	22,077,448	19,357,087	16,962,753
Income taxes, including deferred	19,596,000	17,078,000	18,927,000
Net income	29,168,339	24,291,926	19,811,373
Cash flow	52,463,097	44,905,297	37,698,396
FINANCIAL CONDITION			
Working capital	\$ 77,936,863	\$ 69,573,891	\$ 83,182,403
Ratio of current assets to current liabilities	\$2.64 to \$1.00	\$2.90 to \$1.00	\$2.98 to \$1.00
Property, plant and equipment (Net)	226,032,471	198,903,172	158,481,352
Expenditures for property, plant and equipment	53,278,000	52,050,000	20,609,000
Long-term debt	181,260,000	181,832,881	182,414,532
COMMON STOCK			
Number of shares outstanding ...	9,538,655	9,487,380	8,438,658
Net income per share ⁽¹⁾	\$ 3.00	\$ 2.53	\$2.08
Income taxes per share ⁽¹⁾	2.05	1.80	2.01
Book value per share ⁽⁴⁾	\$12.63	\$10.22	\$8.52

(1) Includes 4 months of combined paper and chemical operations. All prior fiscal years represents paper operations only.

(2) Net sales are stated before deducting freight cost.

Years Ended March 31						
1963	1963 ⁽¹⁾	1962	1961	1960	1959	1958
\$226,554,354	\$ 99,814,250	\$48,578,227	\$50,320,518	\$44,572,285	\$35,881,981	\$34,527,980
42,249,258	15,391,623	5,776,220	7,252,998	6,138,973	6,007,198	5,781,548
15,131,178	6,555,892	2,294,903	2,077,980	2,041,843	1,607,425	1,482,130
13,560,000	4,455,000	1,719,051	2,740,399	1,958,081	2,266,473	2,378,411
13,558,080	4,380,731	1,762,266	2,434,619	2,139,049	2,133,300	1,921,007
30,388,016	12,117,007	4,211,875	4,680,496	4,344,420	3,785,924	3,795,461
\$ 67,337,401	\$ 63,000,811	\$10,313,111	\$ 8,586,720	\$ 7,950,568	\$ 9,143,917	\$ 7,640,165
\$3.36 to \$1.00	\$2.75 to \$1.00	\$3.29 to \$1.00	\$2.73 to \$1.00	\$3.22 to \$1.00	\$3.91 to \$1.00	\$3.92 to \$1.00
155,558,493	150,959,130	29,221,972	28,336,492	27,742,696	24,512,702	20,015,076
18,862,000	4,838,805	4,820,189	2,644,359	5,291,737	6,099,122	2,957,526
192,599,743	196,375,319	15,522,300	13,092,000	13,178,500	13,793,100	8,700,000
2,375,807	1,187,362	1,029,674	976,956	971,803	760,992	699,761
\$1.42	\$.63	\$.24	\$.35	\$.31	\$.32	\$.29
1.45	.69	.28	.45	.32	.39	.41
\$6.69	\$5.31 ⁽⁵⁾	\$3.35	\$3.19	\$2.92	\$2.71	\$2.43

(3) Based on the average number of shares outstanding in each year, adjusted for stock splits and stock dividends, except for the years ended December 31, 1963, 1964, 1965 and 1966, which are based on the number of shares outstanding at the end of these years, with 1963 adjusted for the 3-for-1 stock split in December 1964 and 1963, 1964 and 1965 adjusted for 2,203,200 shares issued in 1964, 1965 and 1966 upon exercise of warrants.

(4) Adjusted for stock splits and stock dividends.

(5) Includes addition to capital surplus of \$1.56 per share resulting from sale of warrants.

Ethyl Corporation

OFFICERS AND STAFF

FLOYD D. GOTTWALD
Chairman of the Board

FLOYD D. GOTTWALD, JR.
Vice Chairman of the Board

GEORGE F. KIRBY
President

LAWRENCE E. BLANCHARD, JR.
Executive Vice President

BRUCE C. GOTTWALD
*Executive Vice President
& Secretary*

MALCOLM P. MURDOCK
Senior Vice President

JOSEPH M. LOWRY
Senior Vice President

JAMES M. GILL
*Vice President
Chemicals Group*

GLENN O. HAYES
*Vice President
Manufacturing*

ROBERT HERZOG
*Vice President
Planning*

LEONARD L. HUXTABLE
*Vice President
Public Relations & Advertising*

THOMAS M. SMYLIE
Vice President

KENNETH L. SWARTWOOD
*Vice President
Research & Development*

FRANK J. McNALLY
Treasurer

JAMES H. KIRBY
Controller

JAMES B. LONERGAN
*Director of Advertising
& Sales Promotion*

G. SAMUEL ROBERTS
Chief Engineer

STEPHEN B. RODI
Director of Employee Relations

FREDERICK P. WARNE
General Counsel

DIRECTORS

FLOYD D. GOTTWALD*
Chairman

FLOYD D. GOTTWALD, JR.*
Vice Chairman

JOSEPH A. COSTELLO
*Retired Vice President,
Ethyl Corporation*

S. DOUGLAS FLEET
*Retired Vice President,
Ethyl Corporation*

BRUCE C. GOTTWALD*

GEORGE F. KIRBY*

JOSEPH M. LOWRY

LAWRENCE E. BLANCHARD, JR.*

ROBERT T. MARSH, JR.
*Retired Chairman of the Board
First & Merchants National Bank
Richmond, Va.*

MALCOLM P. MURDOCK

LEWIS F. POWELL, JR.
*Partner
Hunton, Williams, Gay,
Powell & Gibson
Richmond, Va.*

E. CLAIBORNE ROBINS
*President
A. H. Robins Company
Richmond, Va.*

SIDNEY BUFORD SCOTT
*Partner
Scott & Stringfellow
Richmond, Va.*

ERWIN H. WILL
*Chairman of the Board
Virginia Electric & Power Co.
Richmond, Va.*

* Member of the
Executive Committee

DIVISIONS

Petroleum Chemicals

ROBERT A. DOUGLASS
*Divisional Vice President
& General Manager*

JOHN F. KOEHNLE
General Sales Manager

R. J. OSTRANDER
Technical Director

Industrial Chemicals

MERLE L. GOULD
General Manager

STANLEY A. HARRIS
*Sales Manager
Chlorinated Solvents*

HARRY KUHE
*Sales Manager
General Chemicals*

Ethyl International

ALBERT B. HORN
*Divisional Vice President
& General Manager*

CHESTER D. CARTER
*Divisional Vice President
Business Development*

ETHYL S.A.

WILLIAM J. RUSHER
Managing Director

ETHYL HELLAS CHEMICAL COMPANY S.A.

ELMO F. DIEDRICH
Managing Director

Plastics

CLARENCE M. NEHER
*Divisional Vice President
& General Manager*

VISQUEEN DIVISION

LLOYD B. ANDREW
General Manager

HARRY C. BYRNE, JR.
General Sales Manager

JACK C. WRIGHT
Operations Manager

POLYMER DIVISION

HARRY M. ZIMMERMAN
General Manager

ARTHUR A. SMITH
General Sales Manager

VYPAK CORPORATION

(Wholly-owned subsidiary)

RICHARD F. SANDS
President

Ethyl Corporation of Canada Limited

(Canadian Division
Wholly-owned subsidiary)

ALAN C. TULLY
President

JAMES H. MAIN
*Manager—Petroleum Additives
Department*

ROBERT H. SHANNON
*Manager—Chemical Products
Department*

William L. Bonnell Co., Inc.

E. M. HARVEY
President & Treasurer

WARREN BROCKWAY
*Vice President
& General Sales Manager*

D. A. WAGNER
Vice President—Manufacturing

F. A. DANIELS, JR.
Controller

Albemarle Paper Company (Wholly-owned subsidiary)

C. RAYMOND HAILEY
*Executive Vice President
& General Manager*

JOHN T. WALTON
*Vice President
& Assistant General Manager*

M. LEBBY BOINEST, JR.
*Vice President
Kraft Paper Division*

KIRKWOOD F. ADAMS
*Executive Vice President
Pulp and Paper Manufacturing*

LAWRENCE K. NORTON
Vice President—Sales

KENNETH D. RUNNING
*Vice President—Assistant Manager
Roanoke Rapids Division*

R. C. WILLIAMS
Vice President—Planning

HUGH H. BAIRD, JR.
Treasurer and Controller

W. DOUGLAS GOTTWALD
Secretary

JOHN E. BRYAN, JR.
Director of Industrial Relations

ALBEMARLE CONTAINER DIVISION

JOHN A. COMLY
President

ROBERT G. REDMAN
General Sales Manager

CONSUMER BAG AND PACKAGING DIVISION

R. W. HANNAH
President

JOHN W. EDWARDS
Vice President—Manufacturing

INTERSTATE BAG COMPANY

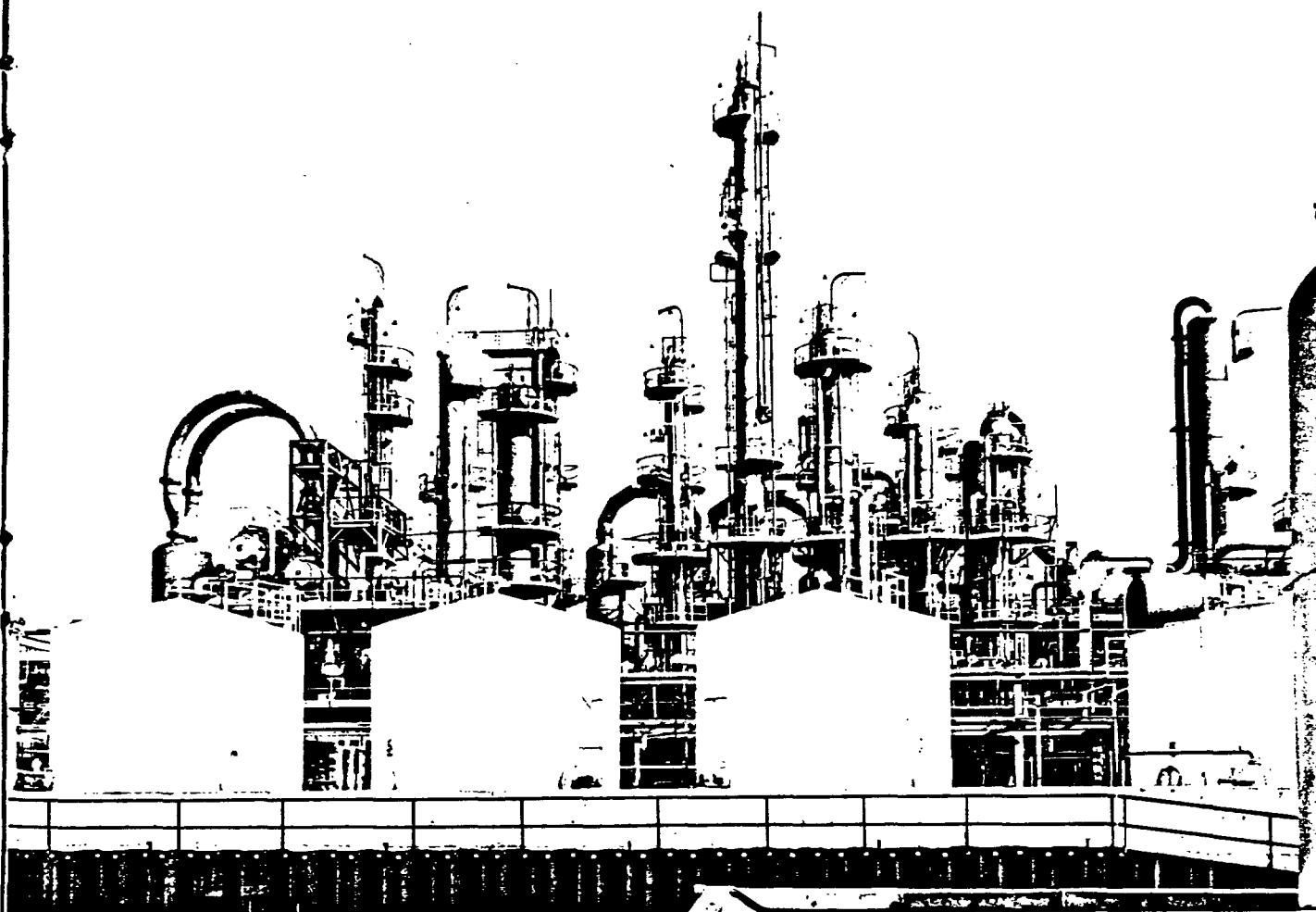
BRENTON S. HALSEY
President

PARVIN E. CANTRELL
Executive Vice President—Sales

RAYMOND BAG DIVISION

DONALD R. RUSSELL
President

CHARLES K. WATTERS
Vice President—Sales



The synthetic primary alcohols plant in Ethyl's Houston manufacturing center. Its principal products are synthetic alcohols used in the manufacture of biodegradable detergents and of plasticizers. The plant also produces aluminum alkyl compounds, which are used as catalysts in the plastics and rubber industries, and it makes aluminum sulfate, which is used in water purification and paper sizing.

Design: Roberts, Reinhardt & Ong, Inc.

ETC 16984

Ethyl Corporation



1966 Annual Report

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