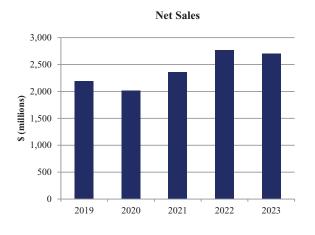


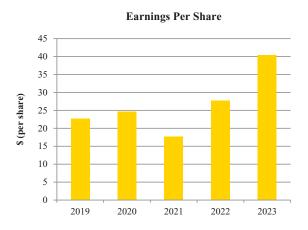
FINANCIAL HIGHLIGHTS

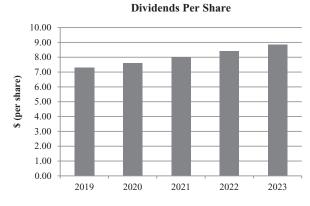
	2023	2022	
	in thousands, except share and per-share amounts		
OPERATIONS:			
Net sales	\$2,698,419	\$2,764,799	
Petroleum additives operating profit	\$ 514,428	\$ 378,244	
Net income	\$ 388,864	\$ 279,538	
Basic and diluted earnings per share	\$ 40.44	\$ 27.77	
FINANCIAL POSITION AND OTHER DATA:			
Cash and cash equivalents	\$ 111,936	\$ 68,712	
Long-term debt	\$ 643,622	\$1,003,737	
Shareholders' equity	\$1,077,061	\$ 762,407	
Shares repurchased during year	119,075	668,553	

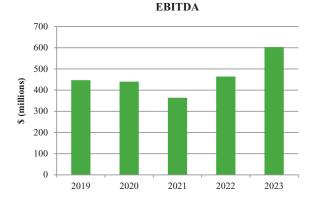
The following graphs present several financial measures, including EBITDA. EBITDA is a non-GAAP financial measure and is defined as income before the deduction of interest and financing expenses, income tax expense, depreciation (on property, plant, and equipment), and amortization (on intangibles and lease right-of-use assets). In addition, we present the non-GAAP financial measure of net debt to EBITDA on the following page and in the letter to our shareholders. Net debt is defined as long-term debt, including current maturities, less cash and cash equivalents and marketable securities. Net debt to EBITDA is defined as net debt divided by EBITDA.

While EBITDA, net debt, and net debt to EBITDA are not required by or presented in accordance with United States generally accepted accounting principles (GAAP), we believe these additional financial measures enhance understanding of our financial performance and period to period comparability. These items should not be considered an alternative to results determined under GAAP. Reconciliations of the GAAP measures to these non-GAAP measures are presented on the following page.









NON-GAAP FINANCIAL INFORMATION

(In thousands, unaudited)

	Years Ended December 31,					
	2019	2020	2021	2022	2023	
Net Income	\$254,286	\$270,568	\$ 190,908	\$ 279,538	\$388,864	
Add:						
Interest and financing expenses, net	29,241	26,328	34,218	35,202	37,359	
Income tax expense	77,304	60,719	56,643	68,196	100,098	
Depreciation and amortization	86,421	82,666	82,532	80,775	76,620	
EBITDA	<u>\$447,252</u>	\$440,281	\$ 364,301	\$ 463,711	\$602,941	
	December 31,					
	2019	2020	2021	2022		
	2019	2020	2021	2022	2023	
Long-term debt, including current maturities Less:	\$642,941	\$598,848	\$1,139,287	\$1,003,737	\$643,622	
Less:						
	\$642,941	\$598,848	\$1,139,287	\$1,003,737	\$643,622	
Less: Cash and cash equivalents	\$642,941 144,397	\$598,848 125,172	\$1,139,287 83,304	\$1,003,737 68,712	\$643,622 111,936	

To Our Shareholders:

I am pleased to report that 2023 was a highly successful and exciting year for our company. Our commitment to safety showed positive results, our R&D team launched a substantial number of new products, and our petroleum additives business achieved four quarters of strong operating profit. In January 2024, we also announced the acquisition of American Pacific Corporation (AMPAC) and look forward to integrating them into our NewMarket family of companies.

Safety and environmental responsibility are core values for us at NewMarket. Our objective is to establish a culture where our employees understand that strong environmental and safety performance is good business, and environmental compliance and safety are individual responsibilities. Our Actively Caring safety effort continues to yield positive results. During 2023, both Afton and Ethyl were top performers among their industry peers with our worldwide injury/illness recordable rate of 0.45. Additionally, we had zero serious injuries across all sites, as well as zero recordable injuries at eight of our facilities. We continue to strive for zero injuries and incidents.

In 2023, we invested heavily in developing new products and technology to keep our customers well-positioned for the future. Our new products and technologies also allow our customers to meet evolving OEM requirements including specific demands of hybrid and electric vehicles, differentiate their products, stay competitive, and reduce their environmental footprint. In 2023, we successfully launched new technologies across all our major lubricant additives and fuel additives product areas. We continue to launch new OEM-specific technology for full battery electric passenger and commercial vehicles and are a top supplier in this new and growing market. In our industrial additives sector, we continue to focus on our next generation wind turbine technology to maintain our technology leadership in this important market.

We are very pleased with the performance of our petroleum additives business and the work done by our team to achieve the strong results. Our continued focus on profitable volume growth, margin management, and cost control are taking hold. We are still, however, challenged by today's inflationary environment and will maintain our focus on improving our efficiency and controlling cost.

We generated solid cash flows throughout the year. Our working capital improved by \$134 million, and we made payments of \$361 million on our revolving credit facility. We returned \$128 million to our shareholders through dividends of \$85 million and stock repurchases of \$43 million. We ended the year with a healthy balance sheet and a Net Debt to EBITDA ratio of 0.9.

AMPAC, our recent acquisition, is the leading North American manufacturer of critical performance additives used in solid rocket motors for space launch and military defense applications. AMPAC is qualified on many NASA and Department of Defense programs and has been serving space launch and national defense programs for more than 60 years. AMPAC also manufactures Halotron BrX, a clean and environmentally friendly fire extinguishing agent.

As we look to 2024, we will work to maintain our commitment to safety excellence, grow profitable volume, and stay focused on margin management. We will also continue our efforts to control our operating costs and inventory levels, while continuing our investment in technology. We will continue to make decisions to promote long-term value for our shareholders and customers, and we remain focused on our long-term objectives.

I would like to thank our dedicated employees for their loyal support to our company. I continue to be impressed by what our team can accomplish as we work together. They embody our One Team, One Goal mentality. And thank you, our shareholders, for your support.

Sincerely,

Thomas E. Gottwald Chairman and CEO



UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

OF 1934	URSUANT TO SECTION 13 OR 15(d) (OF THE SECURITIES EXCHANGE ACT
OF 1734	For the fiscal year ended December	er 31, 2023
☐ TRANSITION REPOR	or RT PURSUANT TO SECTION 13 OR 15	5(d) OF THE SECURITIES EXCHANGE
	For the transition period from Commission file number 1-3	<u>to</u>
NF	WMARKET CORP	PORATION
	orporated pursuant to the Laws of the Com	
	ternal Revenue Service Employer Identific 330 South Fourth Street Richmond, Virginia 23219-4	ation No. 20-0812170
	804-788-5000 Securities registered pursuant to Section	12(b) of the Act.
Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, with no pa		New York Stock Exchange
	curities registered pursuant to Section 12	
Indicate by check mark if the r Act. Yes ⊠ No □	egistrant is a well-known seasoned issuer, as	defined in Rule 405 of the Securities
	egistrant is not required to file reports pursua	nt to Section 13 or Section 15(d) of the
Securities Exchange Act of 193	er the registrant (1) has filed all reports requir 34 during the preceding 12 months (or for such as been subject to such filing requirements for	ch shorter period that the registrant was required
submitted pursuant to Rule 405	er the registrant has submitted electronically est of Regulation S-T (§ 232.405 of this chaptent was required to submit such files). Yes	r) during the preceding 12 months (or for such
Indicate by check mark whether reporting company, or an emer		accelerated filer, a non-accelerated filer, smaller "large accelerated filer," "accelerated filer,"
Large accelerated filer \boxtimes		Accelerated filer
Non-accelerated filer		Smaller reporting company
		Emerging growth company
		s elected not to use the extended transition period ded pursuant to Section 13(a) of the Exchange
Indicate by check mark whether effectiveness of its internal con-	er the registrant has filed a report on and attes atrol over financial reporting under Section 40 lic accounting firm that prepared or issued its	04(b) of the Sarbanes-Oxley Act (15 U.S.C.
registrant included in the filing	reflect the correction of an error to previously	
		ents that required a recovery analysis of incentive- aring the relevant recovery period pursuant to
	er the registrant is a shell company (as defined	d in Rule 12b-2 of the Act). Yes \square No \boxtimes
the registrant's most recently c	ing stock held by non-affiliates of the registra completed second fiscal quarter): \$2,667,996,0 Stock outstanding as of January 31, 2024: 9,5	
	DOCUMENTS INCORPORATED BY	
Portions of NewMarket Corno		24 Annual Meeting of Shareholders to be filed

with the Securities and Exchange Commission pursuant to Regulation 14A under the Securities Exchange Act of 1934 are

incorporated by reference into Part III of this Annual Report on Form 10-K.

^{*} In determining this figure, an aggregate of 2,954,412 shares of Common Stock as beneficially owned by Bruce C. Gottwald and members of his immediate family have been excluded and treated as shares held by affiliates. See Item 12. The aggregate market value has been computed on the basis of the closing price on the New York Stock Exchange on June 30, 2023.



Form 10-K Table of Contents

PART I		
Item 1.	Business	2
Item 1A.	Risk Factors	10
Item 1B.	Unresolved Staff Comments	17
Item 1C.	Cybersecurity	18
Item 2.	Properties	19
Item 3.	Legal Proceedings	19
Item 4.	Mine Safety Disclosures	19
PART II		
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of	
		20
Item 6.	Reserved	21
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	22
Item 7A.	Quantitative and Qualitative Disclosures about Market Risk	32
Item 8.	Financial Statements and Supplementary Data	34
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	74
Item 9A.	Controls and Procedures	74
Item 9B.	Other Information	75
Item 9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	75
PART III		
Item 10.	Directors, Executive Officers and Corporate Governance	76
Item 11.	Executive Compensation	76
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder	
	Matters	76
Item 13.	Certain Relationships and Related Transactions, and Director Independence	77
Item 14.	Principal Accounting Fees and Services	77
PART IV		
Item 15.	Exhibits, Financial Statement Schedules	78
Item 16.	Form 10-K Summary	

PART I

ITEM 1. BUSINESS

NewMarket Corporation (NewMarket) (NYSE: NEU) is a holding company and is the parent company of Afton Chemical Corporation (Afton), Ethyl Corporation (Ethyl), NewMarket Services Corporation (NewMarket Services), and NewMarket Development Corporation (NewMarket Development). NewMarket is also the ultimate parent company of American Pacific Corporation (AMPAC), which we acquired for approximately \$700 million on January 16, 2024.

Each of our subsidiaries manages its own assets and liabilities. Afton manufactures and sells petroleum additives, while Ethyl markets antiknock compounds in North America and performs contracted manufacturing and related services. NewMarket Development manages the real property that we own in Virginia. AMPAC manufactures and sells critical performance additives used in solid rocket motors for space launch and military defense applications. NewMarket Services provides various administrative services to NewMarket, Afton, Ethyl, and NewMarket Development. Going forward, NewMarket Services will also provide such services to AMPAC. NewMarket Services expenses are billed to each subsidiary pursuant to services agreements between the companies.

References in this Annual Report on Form 10-K to "we," "us," "our," and "NewMarket" are to NewMarket Corporation and its consolidated subsidiaries, unless the context indicates otherwise.

As a specialty chemicals company, Afton develops and manufactures highly formulated lubricant and fuel additive packages and markets and sells these products worldwide. Afton is one of the largest lubricant and fuel additives companies in the world. Lubricant and fuel additives are necessary products for efficient and reliable operation of vehicles and machinery. From custom-formulated additive packages to market-general additives, we believe Afton provides customers with products and solutions that make engines run smoother, machines last longer, and fuels burn cleaner.

Through an open, flexible, and collaborative style, Afton works closely with its customers to understand their business and help them meet their goals. This style has allowed Afton to develop long-term relationships with its customers in every major region of the world, which Afton serves through its manufacturing facilities across the globe.

We have operations in North America, Europe, Asia, and South America. The economies are generally stable in the countries where we do most of our business, although many of those countries experience economic challenges from time to time. In countries with more political or economic uncertainty, we generally minimize our risk of loss by utilizing U.S. Dollar-denominated transactions, letters of credit, and prepaid transactions. Further information on our operations in the various geographic areas is in Note 4 of the Notes to Consolidated Financial Statements.

With almost 500 employees in research, development, and testing, Afton is dedicated to developing additive formulations that are tailored to our customers' and the end-users' specific needs. Afton's portfolio of technologically-advanced, value-added products allows it to provide a full range of products, services, and solutions to its customers.

Ethyl provides contracted manufacturing and related services to Afton and to third parties and is a marketer of antiknock compounds in North America.

NewMarket Development manages the real property we own in Richmond, Virginia consisting of approximately 50 acres. Our corporate offices are included in this acreage, as well as a research and testing facility, and several acres dedicated to other uses. We are exploring various development opportunities for portions of the property as the demand warrants. This effort is ongoing in nature.

AMPAC manufactures and sells critical performance additives used in solid rocket motors for space launch and military defense applications. AMPAC also manufactures and sells Halotron BrX, a fire extinguishing agent that replaces legacy high ozone-depleting fire extinguishing agents.

We were incorporated in the Commonwealth of Virginia in 2004. Our principal executive offices are located at 330 South Fourth Street, Richmond, Virginia, and our telephone number is (804) 788-5000.

Business Segments

For the periods presented in this Annual Report on Form 10-K, our business was composed of one segment, petroleum additives, which is primarily represented by Afton. The antiknock compounds business of Ethyl is reflected in the "All

other" category. Each of these is discussed below. We intend to present AMPAC as a separate segment beginning with the Quarterly Report on Form 10-Q for the quarter ending March 31, 2024.

Petroleum Additives - Petroleum additives are used in lubricating oils and fuels to enhance their performance in machinery, vehicles, and other equipment. We manufacture chemical components that are selected to perform one or more specific functions and combine those chemicals with other chemicals or components to form additive packages for use in specified end-user applications. The petroleum additives market is a global marketplace, with customers ranging from large, integrated oil companies to national, regional, and independent companies.

We believe our success in the petroleum additives market is largely due to our ability to deliver value to our customers through our products and our open, flexible, and collaborative working style. We accomplish this by understanding what our customers value and by applying our technical capabilities, formulation expertise, broadly differentiated product solutions, and global supply capabilities to satisfy our customers' needs. We invest significantly in research and development in order to meet our customers' needs and to adapt to the rapidly changing environment for new and improved products and services.

We view the petroleum additives marketplace as being comprised of two broad product applications: lubricant additives and fuel additives. Lubricant additives are highly formulated chemical solutions that, when blended with base fluids, improve the efficiency, durability, performance, and functionality of mineral oils, synthetic oils, and biodegradable fluids, thereby enhancing the performance of machinery and engines. Fuel additives are chemical components that help oil refiners meet fuel specifications or formulated packages that improve the performance of gasoline, diesel, biofuels, and other fuels, resulting in lower operating costs, improved vehicle performance, and reduced emissions.

Lubricant Additives

Lubricant additives are essential ingredients for making lubricating oils. Lubricant additives are used in a wide variety of vehicle and industrial applications, including engine oils, transmission fluids, off-road powertrain and hydraulic systems, gear oils, hydraulic oils, and turbine oils, and virtually any other application where metal-to-metal moving parts are utilized. Lubricant additives are organic and synthetic chemical components that enhance wear protection, prevent deposits, and protect against the hostile operating environment of an engine, transmission, axle, hydraulic pump, or industrial machine.

Lubricants are widely used in operating machinery from transportation vehicles to heavy industrial equipment. Lubricants provide a layer of protection between moving mechanical parts. Without this layer of protection, the normal functioning of machinery would not occur. Effective lubricants reduce downtime and increase efficiency. Specifically, lubricants serve the following main functions:

- friction reduction Friction is reduced by maintaining a thin film of lubricant between moving surfaces, preventing them from coming into direct contact with one another and reducing wear on moving machinery, thereby providing longer life and operational efficiency.
- heat removal Lubricants act as coolants by removing heat resulting either from friction or through contact with other, higher temperature materials.
- containment of contaminants Lubricants function by carrying contaminants away from the machinery and neutralizing the harmful impact of the by-products created by combustion.

The functionality of lubricants is created through an exact balance between a base fluid and performance-enhancing additives. This balance is the goal of effective formulations achieved by experienced research and development professionals. We offer a full line of lubricant additive packages, each of which is composed of component chemicals specially selected to perform desired functions. We manufacture most of the chemical components and blend these components to create formulated additive packages designed to meet industry and customer specifications. Lubricant additive components are generally classified based upon their intended functionality, including:

- detergents, which clean moving parts of engines and machines, suspend oil contaminants and combustion by-products, and absorb acidic combustion products;
- dispersants, which serve to inhibit the formation of sludge and particulates;

- extreme pressure/antiwear agents, which reduce wear on moving engine and machinery parts;
- viscosity index modifiers, which improve the viscosity and temperature characteristics of lubricants and help the lubricant flow evenly to all parts of an engine or machine; and
- antioxidants, which prevent oil from degrading over time.

We are one of the leading global suppliers of specially formulated lubricant additives that combine some or all of the components described above to develop our products. Our products are highly formulated, complex chemical compositions derived from extensive research and testing to ensure all additive components work together to provide the intended results. Our products are engineered to meet specifications prescribed by either the industry or a specific customer. Purchasers of lubricant additives tend to be integrated oil companies or independent compounders/blenders. We make no sales directly to end-users or to original equipment manufacturers (OEMs).

We view our participation in the lubricant marketplace in three primary areas: engine oil additives, driveline additives, and industrial additives. Our view is not necessarily the same way others view the market.

Engine Oil Additives - The largest submarket within the lubricant additives marketplace is engine oil additives which consists of additives designed for passenger cars, motorcycles, on and off-road heavy duty commercial equipment, locomotives, and large engines in ocean-going vessels. We estimate engine oil additives represent approximately 70% of the overall lubricant additives market volume.

The engine oil market's primary customers include consumers, fleet owners, mining and construction companies, farmers, railroads, shipping companies, service dealers, and OEMs. The primary functions of engine oil additives are to reduce friction, prevent wear, control formation of sludge and oxidation, and prevent rust. Engine oil additives are typically sold to lubricant manufacturers who combine them with a base oil fluid to meet internal, industry, and OEM specifications.

Key drivers of engine oil additives demand are the number of vehicles on the road, total vehicle miles driven, fuel economy, the average age of vehicles on the road, drain intervals, engine and crankcase size, changes in engine design, and temperature and specification changes driven by OEMs. The extension of drain intervals has generally offset increased demand due to higher vehicle population, new hardware, and more miles driven. Other key drivers include industrial production rates, agricultural output, mining and construction output, environmental regulations, and infrastructure investments of commercial companies. Afton offers products that enhance the performance of mineral, part-synthetic, and fully-synthetic engine oils.

Driveline Additives - The driveline additives submarket is comprised of additives designed for products such as transmission fluids, axle fluids, and off-road powertrain fluids. This submarket shares in the 30% of the market not covered by engine oil additives. Transmission fluids primarily serve as the power transmission and heat transfer medium in the area of the transmission where the torque of the drive shaft is transferred to the gears of the vehicle. Axle fluids lubricate gears and bearings in axles, and powertrain fluids are used in off-highway powertrain and hydraulic systems. Other products in this area include power steering fluids, shock absorber fluids, gear oils, and lubricants for heavy machinery. Additionally, as a leading additive supplier to the electric vehicle market, we are investing in and delivering new technologies to enable electric vehicle market growth to help reduce carbon emissions. We anticipated and are responding to the need for future lubricants to consider conductivity, the effect of electric fields, low friction/high speed, noise, and battery cooling or copper wire drawing. All driveline additives products must conform to highly prescribed specifications developed by vehicle OEMs for specific models or designs. Driveline additives are generally sold to oil companies for ultimate sale to vehicle OEMs for new vehicles (factory-fill), service dealers for aftermarket servicing (service-fill), retailers, and distributors.

Key drivers of the driveline additives marketplace are the number of vehicles manufactured, total number of vehicles in operation, drain intervals for transmission fluids and axle fluids, changes in engine and transmission design and temperatures, and specification changes driven by OEMs.

Industrial Additives - The industrial additives submarket is comprised of additives designed for products for industrial applications such as hydraulic fluids, grease, industrial gear fluids, and industrial specialty applications, such as turbine oils. This submarket also shares in the 30% of the market not covered by engine oil additives. These products

must conform to industry specifications, OEM requirements, and/or application and operating environment demands. Industrial additives are generally sold to oil companies, service dealers for after-market servicing, and distributors.

Key drivers of the industrial additives marketplace are gross domestic product levels and industrial production.

Fuel Additives

Fuel additives are chemical compounds that are used to improve both the oil refining process and the performance of gasoline, diesel, biofuels, and other fuels. Benefits of fuel additives in the oil refining process include reduced use of crude oil, lower processing costs, and improved fuel storage properties. Fuel performance additives enhance fuel economy, improve ignition and combustion efficiency, reduce emission particulates, maintain engine cleanliness, and protect against deposits in fuel injectors, intake valves, and the combustion chamber. Our fuel additives are extensively tested and designed to meet stringent industry, government, OEM, and individual customer requirements.

Many different types of additives are used in fuels. Their use is generally determined by customer, industry, OEM, and government specifications, and often differs from country to country. The types of fuel additives we offer include:

- gasoline performance additives, which clean and maintain key elements of the fuel delivery systems, including fuel injectors and intake valves, in gasoline engines;
- diesel fuel performance additives, which perform similar cleaning functions in diesel engines;
- cetane improvers, which increase the cetane number (ignition quality) in diesel fuel by reducing the delay between injection and ignition;
- stabilizers, which reduce or eliminate oxidation in fuel;
- corrosion inhibitors, which minimize the corrosive effects of combustion by-products and prevent rust;
- lubricity additives, which restore lubricating properties lost in the refining process;
- cold flow improvers, which improve the pumping and flow of distillate and diesel fuels in cold temperatures;
- static dissipating additives.

We offer a broad line of fuel additives worldwide and sell our products to major fuel marketers and refiners, as well as independent terminals and other fuel blenders.

Key drivers in the fuel additive marketplace include total vehicle miles driven, fuel economy, the introduction of new engine designs, regulations on emissions (both gasoline and diesel), quality of the crude oil slate and performance standards, and marketing programs of major oil companies.

Competition

We believe we are one of the four largest manufacturers and suppliers in the petroleum additives marketplace.

In the lubricant additives submarket, our major competitors are The Lubrizol Corporation (a wholly-owned subsidiary of Berkshire Hathaway Inc.), Infineum (a joint venture between ExxonMobil Chemical and Shell plc), and Chevron Oronite Company LLC. There are several other suppliers in the worldwide market who are competitors in their particular product areas.

The fuel additives submarket is characterized by more competitors. While we participate in many facets of the fuel additives market, our competitors tend to be more narrowly focused. In the gasoline detergent market, we compete mainly against BASF, Chevron Oronite Company LLC, Innospec Inc., and The Lubrizol Corporation. In the diesel and refinery markets, we compete mainly against The Lubrizol Corporation, Infineum, BASF, Clariant Ltd., Dorf Ketal, and Innospec Inc. We also compete against other regional companies in the fuel additives marketplace.

The competition among the participants in these industries is characterized by the need to provide customers with cost effective, technologically-capable products that meet or exceed industry specifications. The need to continually increase technology performance and lower cost through formulation technology and cost improvement programs is vital for success in this environment.

All Other - The "All other" category includes the operations of the antiknock compounds business (primarily sales of antiknock compounds in North America), as well as certain contracted manufacturing and related services performed by Ethyl. The Ethyl facility is located in Houston, Texas and is substantially dedicated to terminal operations related to antiknock compounds and other fuel additives. The financial results of the petroleum additives activities performed by Ethyl are reflected in the petroleum additives segment results. The "All other" category financial results include a service fee charged by Ethyl for its production services to Afton.

Raw Materials and Product Supply

We use a variety of raw materials and chemicals in our manufacturing and blending processes and believe the sources of these are adequate for our current operations. The primary raw materials for Afton are base oil, polyisobutylene, antioxidants, alcohols, solvents, detergents, friction modifiers, olefins, and copolymers.

As the performance requirements of our products become more complex, we often work with highly specialized suppliers. In some cases, we source from a single supplier. In such cases, we manage our risk by maintaining safety stock of the raw material or qualifying alternate suppliers, which could take additional time to implement, but we are confident we can ensure continued supply for our customers.

While we have experienced improvement in the supply chain disruptions which impacted the petrochemicals industry over the past several years, we continuously monitor our raw material supply situation and adjust our procurement strategies as conditions require.

Research, Development, and Testing

Research, development, and testing (R&D) provides Afton with new performance-based solutions for our customers in the petroleum additives market. We develop products through a combination of chemical synthesis, formulation development, engineering design, and performance testing. In addition to developing new products, R&D provides our customers and OEMs with data to substantiate product differentiation and technical support to assure total customer satisfaction.

We are committed to providing the most advanced products, comprehensive testing programs, and superior technical solutions tailored to the needs of our customers and OEMs worldwide. Afton continues to successfully implement techniques to drive efficiency in technology discovery and development, while aligning our internal testing to market changes, research, customer support, and predictive capabilities around the world in support of our goals of providing market-driven technical leadership and performance-based differentiation. In 2023, we continued to invest in and progress our technology plans and established a new team to focus on adjacent spaces that can utilize our chemistry and technology.

Afton continues to develop new products and technology to keep our customers well-positioned for the future by meeting evolving OEM requirements, including specific demands of hybrid and electric vehicles, industry specifications, and environmental regulations. A significant portion of our R&D investment is dedicated to the development of products that are differentiated by their ability to deliver improved fuel efficiency in addition to robust performance in a wide range of new vehicle and industrial equipment designs. Afton's state-of-the art testing capabilities enable customized research in all areas of performance needed by both OEMs and tier one suppliers including the latest advancements in e-mobility. Our leading-edge capabilities and fundamental understanding in the areas of combustion, friction control, energy efficiency, electric motor compatibility, and wear prevention are used to set the stage for next-generation products in all areas.

In line with Afton's vision, we continue to focus our technology to make the world a better place by reducing the use of chemicals of concern, using more raw materials from sustainable sources, developing additives that enable some of the world's most fuel efficient fluids, creating fuel additives that enable engines to be more efficient, and being a market leader in transmission fluids for full battery electric vehicles. We continue to have strong results in our environmental initiatives. For example, a year over year comparison (2023 versus 2022) of our Richmond site shows a 24% reduction in hazardous waste generation and an energy usage decrease of over 8% due to LED light installations and changes in laboratory operating procedures.

In 2023, we successfully launched new technologies across all our lubricant additives and fuel additives product areas. We developed new engine oil products for passenger cars and commercial trucks in support of our customers in all the major regions of the world in which we operate, including engine oil technology designed for hybrid vehicles, as well as solutions for commercial vehicles.

We continued to develop new products in multiple application areas in the industrial additives sector, including hydraulic, industrial gear, turbine, slideway, and grease additives. Research is focused on the development of technologies that will provide differentiation to our customers in multiple performance areas, including equipment life, reliability, and energy efficiency, as well as eliminating or reducing chemicals of concern. This includes focusing on our next generation wind turbine technology to maintain our technology leadership in this important and growing market.

Research continued in our transmission fluid, axle oil, and tractor fluid product lines. This included the development of new OEM-specific additives used in factory-fill fluids installed during automotive component and vehicle assembly. We continue to launch new OEM-specific technology for full battery electric passenger and commercial vehicles and are a top supplier in this new and growing market. Our market-leading battery electric vehicle transmission fluid promotes efficiency, and we developed new products for the service-fill sector to provide our customers with the latest additive technology available.

We also provide leading technology in the fuel additives area. In 2023, we developed new technology in both gasoline performance additives and diesel performance additives. This includes launching a new technology platform designed for gasoline direct injection engines that is both more efficient and better-performing. In addition, we continue to maintain close interactions with regulatory, industry and OEM leaders to guide our development of future fuel additives technologies based on well-defined market needs.

Afton remains committed to providing the most advanced products, comprehensive testing programs, and superior technical solutions tailored to the needs of our customers and OEMs worldwide.

Intellectual Property

Our intellectual property, including our patents, licenses, and trademarks, is an important component of our business. We actively protect our inventions, new technologies, and product developments by filing patent applications and maintaining trade secrets. We currently own approximately 1,500 issued or pending United States and foreign patents. In addition, we have acquired the rights under patents and inventions of others through licenses or otherwise. We take care to respect the intellectual property rights of others, and we believe our products do not infringe upon those rights. We vigorously participate in patent opposition proceedings around the world, where necessary, to secure a technology base free of infringement. We believe our patent position is strong, aggressively managed, and sufficient for the conduct of our business.

We also have several hundred trademark registrations throughout the world for our marks, including NewMarket[®], Afton Chemical[®], Ethyl[®], HiTEC[®], Passion for Solutions[®], DriveMore[®], and Axcel[®].

Human Capital

Our Values are the foundation of our company and support the inclusive and respectful culture we have established in all of our locations around the world. Our Values include:

- · unquestioned integrity,
- respect for people,
- safety and environmental responsibility,
- partners with customers and suppliers,
- continuously improving quality,
- · citizenship, and
- economic viability.

We place the highest level of commitment on safety and strive to operate our business every day focused on its importance. Keeping our employees safe is a management priority.

We have a diverse workforce, representative of the geographic regions in which we do business. We place a high value on diverse thoughts, skills, perspectives, cultures, and knowledge because we believe that such diversity results in better business decision making. We employed approximately 2,000 people at the end of 2023. Approximately 1,000 were located in the United States, 500 were in the Europe/Middle East/Africa/India region, 300 were in the Asia Pacific region, and 200 were in the Latin America region. Approximately 21% of our workforce is represented by unions.

When we hire new employees, our goal is that they stay with our company for the remainder of their career. Hiring the right people for the long-term and developing them for key roles is a critical focus area. To be successful, we must attract and retain a highly qualified and technically competent workforce, including key employees in leadership positions. As technology changes in the petroleum additives industry are ongoing, the success of our business is very dependent upon our ability to attract and retain highly qualified scientific and technical personnel. In addition to utilizing our internal network, contacts, and specialized recruiters to identify and attract qualified personnel, we have established relationships with a number of universities globally and have intern and co-op programs in many of our locations.

Globally, approximately 16% of our employees have 20 years or more of service, and over the three-year period from 2021 through 2023, our resignation rate was approximately 5.4%. We believe these measures demonstrate our success in hiring the right employees for the long-term and establishing a culture where respect for people is an everyday value.

Commitment to Environmental and Safety Excellence

Our commitment to the environment and safety excellence applies to every employee, contractor, and visitor every day, at every site. Safety and environmental responsibility are a way of life at NewMarket - enhancing operations, the way we work, and the relationships we maintain with our employees, customers, supply chain partners, and the communities in which we operate. Our objective is to establish a culture where our employees understand that good environmental and safety performance is good business and understand that environmental compliance and safety are individual responsibilities. Every employee at NewMarket is responsible for ensuring that our high standards in the area of health, safety (including process safety), environmental protection, and security are upheld at all times.

Our Global Responsible Care Policy Statement includes a commitment to conduct operations in a manner that protects our employees, communities, and the environment, to comply with all applicable laws and regulations, and to reduce our environmental impact. Additionally, in pursuit of our vision of zero incidents, we work with our employees and other key stakeholders to establish appropriate goals, objectives, and targets.

Both Afton and Ethyl have implemented Responsible Care® Management Systems (RC14001®) at North American facilities ("Responsible Care" is a registered service mark of the American Chemistry Council (ACC)). Our Responsible Care® management systems are certified by an independent third-party auditing process. Additionally, Afton's Feluy, Belgium; Suzhou, China; Tsukuba, Japan; Rio de Janeiro, Brazil; Bracknell, England; and Singapore facilities are all certified to the environmental standard ISO 14001. The Suzhou and Singapore sites are also certified to ISO 45001, a global occupational health and safety standard. Our San Juan del Rio, Mexico site is formally certified to RC 14001/ISO 14001. Afton's Sauget, Illinois plant continues to be an OSHA VPP (Voluntary Protection Program) "Star" worksite.

In 2023, we continued to enhance our "Actively Caring" safety program, where people look out for the safety and welfare of others with courage and compassion, enabling the achievement of an injury-free environment. Both Afton and Ethyl were top performers among their industry peers. The NewMarket worldwide injury/illness recordable rate (which is the number of injuries per 200,000 hours worked) in 2023 was 0.45. Additionally, during 2023 we had zero serious injuries across all sites, as well as zero recordable injuries at our Port Arthur, Ashland, Richmond R&D, Rio de Janeiro, San Juan del Rio, Singapore, Suzhou, and Tsukuba facilities. The safety performance affirmed our Vision of Zero improvement plans and actions across the sites, as well as the importance placed on our safety-first culture. We continue to leverage site-level safety improvement plans at key sites and emphasize reporting "good catches" and "near misses" to help reduce risk and drive improved performance. We are committed to achieving our aspiration of zero injuries and incidents.

As members of the ACC, Afton and Ethyl provide data on twelve metrics used to track environmental impact, safety, energy use, community outreach and emergency preparedness, greenhouse gas intensity, and product stewardship performance of the ACC member companies. These can be viewed at https://www.americanchemistry.com/chemistry-in-america/responsible-care-driving-safety-industry-performance/metrics-transparent-reporting/individual-member-company-performance-reporting. The information on this website is not, and shall not be deemed to be, a part of this Annual Report on Form 10-K or incorporated by reference in this Annual Report on Form 10-K or any other filings we make with the Securities and Exchange Commission (SEC).

Governmental and Environmental Regulations

As a chemical company, we are subject to regulation by local, state, federal, and foreign governmental authorities specific to the production, distribution, management, and stewardship of chemicals.

In addition, in the United States and under similar foreign and state laws, we are subject to a variety of environmental laws and regulations, as well as environmental liabilities associated with the investigation and cleanup of hazardous substances. These liabilities may include personal injury, property damage, or natural resource damages arising from the release of, or exposure to, hazardous substances. They may be imposed on us in a range of situations without regard to violation of law or regulations. They may also be imposed jointly and severally, where one party may be held liable for a disproportionate share of the damages, up to and including the entire loss. These liabilities may include entities with any possible connection to the hazardous substances, including, for example, entities that formerly owned or operated a property or entities that arranged for disposal of hazardous substances from a property.

We believe we comply, in all material respects, with laws, regulations, statutes, and ordinances, including, but not limited to, those protecting the environment, as well as those related to the management and stewardship of chemicals. We have policies and procedures in place that establish regular reviews of our regulatory and environmental compliance and product stewardship, and actively monitor any significant existing or potential regulatory changes or environmental issues that could materially affect the company.

Our total accruals for environmental remediation, dismantling, and decontamination were approximately \$11 million at December 31, 2023 and \$10 million at December 31, 2022. As new technology becomes available, it may be possible to reduce accrued amounts. While we believe that we are currently fully accrued for known environmental issues, it is possible that unexpected future costs could have a significant financial impact on our financial position, results of operations, and cash flows.

The costs of complying with existing environmental, health, and safety laws and regulations as they pertain to our products and operations, including remediation, closure, and postclosure costs, are primarily included in cost of goods sold. We spent approximately \$41 million in 2023, \$37 million in 2022, and \$35 million in 2021 for ongoing environmental operating and clean-up costs, excluding depreciation of previously capitalized expenditures.

In addition to the ongoing environmental compliance costs and the costs to remediate contaminated sites, worldwide capital expenditures for pollution prevention and safety projects were \$10 million in 2023, \$11 million in 2022, and \$17 million in 2021.

The costs of complying with governmental pollution prevention and safety regulations are subject to:

- potential changes in applicable statutes and regulations (or their enforcement and interpretation);
- uncertainty as to the success of anticipated solutions to pollution problems;
- uncertainty as to whether additional expense may prove necessary; and
- potential for emerging technology to affect remediation methods and reduce associated costs.

Availability of Reports Filed with the Securities and Exchange Commission and Corporate Governance Documents

Our internet website address is www.newmarket.com. We make available, free of charge through our website, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (Exchange Act), as soon as reasonably practicable after such documents are electronically filed with, or furnished to, the SEC. In addition, our Corporate Governance Guidelines, Code of Conduct, and the charters of our Audit, Compensation, and Nominating and Corporate Governance Committees are available on our website and are available in print, without charge, to any shareholder upon request by contacting our Corporate Secretary at NewMarket Corporation, 330 South Fourth Street, Richmond, Virginia 23219. The information on our website is not, and shall not be deemed to be, a part of this Annual Report on Form 10-K or incorporated by reference in this Annual Report on Form 10-K or any other filings we make with the SEC. We file our annual, quarterly and current reports, proxy statements, and other information with the SEC. Our SEC filings are available to the public on the SEC's website at www.sec.gov.

Information about our Executive Officers

The names and ages of all executive officers as of February 15, 2024 follow.

Name	Age	Positions
Thomas E. Gottwald	63	Chairman of the Board, President, and Chief Executive Officer
		(Principal Executive Officer)
William J. Skrobacz	64	Vice President and Chief Financial Officer (Principal Financial
		Officer)
Bruce R. Hazelgrove, III	63	Executive Vice President and Chief Administrative Officer
Bryce D. Jewett, III	49	Vice President and General Counsel
Gail C. Ridgeway	49	Controller (Principal Accounting Officer)
Brian D. Paliotti	47	President, Afton Chemical Corporation

Our officers, at the discretion of the Board of Directors, hold office until the meeting of the Board of Directors following the next annual shareholders' meeting. Mr. Gottwald and Mr. Hazelgrove have served in their capacity for at least the last five years. Mr. Skrobacz, Mr. Jewett, Mrs. Ridgeway, and Mr. Paliotti have served in their capacities for less than five years.

Mr. Skrobacz joined the company in May 2011 as Senior Manager, Business Assurance, was appointed Controller Designate in September 2012, appointed Principal Accounting Officer and Controller on May 1, 2013, and appointed Chief Financial Officer and Vice President on January 1, 2023. Mr. Jewett joined NewMarket Corporation in July 2020 as Vice President and General Counsel. Prior to his employment at NewMarket, he was a partner at McGuireWoods LLP. Mrs. Ridgeway joined the company in December 2011 as Tax Compliance Manager, became Tax Director in April 2017, Assistant Controller in March 2021, and Controller on January 1, 2023. Mr. Paliotti joined NewMarket in June 2008 as Financial Officer for Afton Chemical Corporation, was appointed Senior Financial Officer of NewMarket Services Corporation in October 2011, promoted to Vice President, Finance of NewMarket Services Corporation in May 2013, and promoted to Vice President and Chief Financial Officer in January 2015. He became President of Afton Chemical Corporation on January 1, 2023.

ITEM 1A. RISK FACTORS

Our business is subject to many factors that could have a material adverse effect on our future performance, results of operations, financial condition, or cash flows and could cause our actual results to differ materially from those expressed or implied by forward-looking statements made in this Annual Report on Form 10-K. Those risk factors are outlined below.

Market and Supply Chain Risks

 Sudden, sharp, or prolonged changes in the prices of and/or demand for raw materials may adversely affect our profit margins.

We utilize a variety of raw materials in the manufacture of our products, including base oil, polyisobutylene, antioxidants, alcohols, solvents, detergents, friction modifiers, olefins, and copolymers. We may also enter into contracts which commit us to purchase some of our more critical raw materials based on anticipated demand. Our profitability is sensitive to changes in the quantities of raw materials we may need and the costs of those materials which may be caused by changes in supply, demand or other market conditions, including general inflation, over which we have little or no control. Political and economic conditions globally have caused, and may continue to cause, our demand for and the cost of our raw materials to fluctuate. War, armed hostilities, terrorist acts, civil unrest, inclement weather events, or other incidents may also cause a sudden, sharp, or prolonged change in our demand for and the cost of our raw materials. We cannot assure that we will be able to pass on to our customers any future increases in raw material costs in the form of price increases for our products. If our demand for raw materials were to decline such that we would not have need for the quantities required to be purchased under commitment agreements, we could incur additional charges that would affect our profitability.

• Lack of availability of raw materials, including sourcing from some single suppliers, could negatively impact our ability to meet customer demand.

The chemical industry can experience limited supply of certain materials. In addition, in some cases, we choose to source from a single supplier. Any significant disruption in supply, for any reason, could adversely affect our ability to obtain raw materials, which in turn could adversely affect our ability to ensure continued supply for our customers and to meet customer demand.

Competitive pressures could adversely affect our margins and profitability.

We face significant competition in all of the product lines and markets in which we operate. We expect that our competitors will develop and introduce new and enhanced products, which could cause a decline in the market acceptance of certain products we manufacture. In addition, as a result of price competition, we may be compelled to reduce the prices for some of our products, which could adversely affect our margins and profitability. Some of our competitors may also have greater financial, technological, and other resources than we have and may be able to maintain greater operating and financial flexibility than we are able to maintain. As a result, these competitors may be able to better withstand changes in conditions within our industry, changes in the prices for raw materials, and changes in general economic conditions.

 We rely on a small number of significant customers concentrated in the lubricant and fuel industries. The loss of sales to any of these customers could significantly reduce our revenues and negatively affect our profitability.

Our principal customers are multinational oil companies in the lubricant and fuel industries. These industries are characterized by the concentration of a few large participants. This concentration of customers affects our overall risk profile, since our customers will be similarly affected by changes in economic, geopolitical, and industry conditions. Many factors affect the level of our customers' spending on our products, including, among others, general business conditions, changes in technology, interest rates, oil prices, and consumer confidence in future economic conditions. A sudden or protracted downturn in these industries could adversely affect the buying power of, and purchases by, our customers. The loss of a significant customer or a material reduction in purchases by a significant customer could reduce our revenues and negatively affect our profitability.

Operational Risks

• A disruption in the availability or capacity of distribution systems could negatively impact our ability to meet our customers' needs and affect our competitive position.

We rely on a variety of modes of transportation to deliver products to our customers, including rail cars, cargo ships, and trucks. We depend upon the availability of a distribution infrastructure to deliver our products in a safe and timely manner. Any disruptions in this infrastructure network, whether caused by human error, accidents, armed conflicts, deliberate acts of violence, limitations on capacity, repairs and improvements to infrastructure components, earthquakes, storms, or other natural disasters, could adversely affect our ability to meet customer demand.

A significant disruption or disaster at one of our production facilities, including those facilities
which are sole producers of certain of our products, could result in our inability to meet
production requirements and projected customer demand resulting in a negative impact to our
profitability and relationships with our customers. These could also potentially result in us
incurring significant liabilities.

We are dependent upon the continued safe operation of our production facilities. Several of the products we sell are produced only in one location. A prolonged disruption or disaster at one of our facilities could result in our inability to meet production requirements.

Our production facilities are subject to various hazards associated with the manufacturing, handling, storage, and transportation of chemical materials and products, including some that are reactive, explosive, and flammable. Such hazards could include leaks, ruptures, chemical spills, explosions, or fires which result in the discharge or release of toxic or hazardous substances or gases; mechanical failures; unscheduled downtime; and environmental hazards. The occurrence of any of these hazards could cause a disruption in the production of our products and may diminish our ability to meet output goals. These sites may also experience significant disruptions in operations due to inclement weather, natural disasters, flooding, and levee breaches. We cannot assure that our facilities will not experience these types of hazards and disruptions in the future or that these incidents will not result in production delays and affect our ability to meet production requirements. Any such hazards or disruptions at our facilities could result in us losing revenue or not being able to maintain our relationships with our customers.

Additionally, some of the hazards or disruptions mentioned above could result in significant liabilities related to personal injury and loss of life; severe damage to, or destruction of, property and equipment; and environmental contamination.

 Our research and development efforts are costly and may not succeed, which could impair our ability to meet our customers' needs, affect our competitive position, and result in a loss of market share.

The petroleum additives industry is subject to periodic technological change, changes in performance standards, and ongoing product improvements. Further, technological changes in some or all of our customers' products or processes, including the development and customer acceptance of electric vehicles, may make some of our products obsolete. As a result, the life cycle of our products is often hard to predict. In order to maintain our profits and remain competitive, we must effectively respond to technological changes in our industry and successfully develop, manufacture, and market new or improved products in a cost-effective and timely manner. As a result, we must commit substantial resources each year to research and development to maintain and enhance our technological capabilities and meet our customers' changing needs. Ongoing investments in research and development for future products could result in higher costs without a proportional increase in profits. Additionally, for any new product program, there is a risk of technical or market failure in which case we may not be able to develop the new commercial products needed to maintain and enhance our competitive position, or we may need to commit additional resources to new product development programs. Moreover, new products may have lower margins than the products they replace.

In order to be successful, we must attract and retain a highly qualified workforce, including key employees in leadership positions.

The success of our business is highly dependent on our ability to attract and retain highly qualified personnel to support our research and development efforts and our agility in effectively responding to technological changes in our industry. To the extent that the demand for skilled personnel exceeds supply, we could experience higher labor, recruiting, or training costs in order to attract and retain such a work force. We compete with other companies, both within and outside of our industry, for qualified technical and scientific personnel such as chemical, mechanical, and industrial engineers. To the extent that we lose experienced personnel through wage competition, normal attrition (including retirement), or other means, we must be able to attract qualified candidates to fill those positions and successfully manage the transfer of critical knowledge from those individuals leaving our company. An inability to maintain a highly qualified technical workforce could adversely affect our competitive position and result in a loss of market share.

We also must manage leadership development and succession planning throughout our business. To the extent that we are unable to attract, develop, and retain leadership talent successfully, we could experience business disruptions that adversely affect our ability to grow our business.

• Failure to protect our intellectual property rights could harm our competitive position and could adversely affect our future performance and growth.

Protection of our proprietary processes, methods, compounds, and other technologies is important to our business. We depend upon our ability to develop and protect our intellectual property rights to distinguish our products from those of our competitors. Failure to protect our existing intellectual property rights may result in the loss of valuable technologies or having to pay other companies for infringing on their intellectual property rights. An inability to continue using certain of our trademarks or service marks could result in the loss of brand recognition and could require us to devote additional resources to advertise, rebrand our products, and market our brands. See Item 1, "Business-Intellectual Property."

We rely on a combination of patent, trade secret, trademark, and copyright laws, as well as judicial enforcement, to protect our intellectual property and technologies. We cannot assure that the measures taken by us to protect these assets and rights will provide meaningful protection or that adequate remedies will be available in the event of an unauthorized use or disclosure of our trade secrets or manufacturing expertise. We cannot assure that any of our intellectual property rights will not be challenged, invalidated, circumvented, or rendered unenforceable. In addition, we have manufacturing operations in countries where we may not have the same strength of intellectual property protection and enforcement as in North America or Europe, resulting in a greater risk of a third party appropriating our intellectual property.

Furthermore, we cannot assure that any pending patent application filed by us will result in an issued patent, or if patents are issued to us, that those patents will provide meaningful protection against competitors or against competitive technologies. We could face patent infringement claims from our competitors or others alleging that our processes or products infringe on their proprietary technologies. If we were found to be infringing on the proprietary technology of others, we may be liable for damages, and we may be required to change our processes, redesign our products partially or completely, pay to use the technology of others, or stop using certain technologies or producing the infringing product entirely. Even if we ultimately prevail in an infringement suit, the existence of the suit could prompt customers to switch to products that are not the subject of infringement suits. We may not prevail in any intellectual property litigation and such litigation may result in significant legal costs or otherwise impede our ability to produce and distribute key products.

We also rely on unpatented proprietary manufacturing expertise, continuing technological innovation, trade secrets, and other intellectual property to develop and maintain our competitive position. While we generally enter into confidentiality agreements with our employees and third parties to protect our intellectual property, we cannot assure that our confidentiality agreements will not be breached, that they will provide meaningful protection for our trade secrets and proprietary manufacturing expertise, or that adequate remedies will be available in the event of an unauthorized use or disclosure of our trade secrets or manufacturing expertise.

In addition, our trade secrets and know-how may be improperly obtained by other means, such as a breach of our information technology security systems or direct theft. Any unauthorized disclosure of our material know-how or trade secrets could adversely affect our business and results of operations.

• An information technology system failure may adversely affect our business.

We rely on information technology systems, some of which are managed by third parties, to transact our business. An information technology system failure due to computer viruses, internal or external security breaches, cybersecurity attacks, power interruptions, hardware failures, fire, natural disasters, human error or other causes could disrupt our operations, lead to loss of confidential information (such as the personally identifiable information of individuals, including our employees) or intellectual property, and/ or prevent us from being able to process transactions with our customers, operate our manufacturing facilities, and properly report transactions in a timely manner. Cybersecurity threats, in particular, continue to increase in sophistication. We have security processes and disaster recovery plans in place to mitigate these threats. Nonetheless, these may not be sufficient to identify a threat in a timely manner or protect our operations from such a threat, potentially resulting in financial, legal, business, or reputational damage to our company.

A significant or protracted information technology system failure may adversely affect our results of operations, financial condition, or cash flows.

Furthermore, we are subject to evolving cybersecurity and data privacy rules and regulations, such as the European Union's General Data Protection Regulation, in countries, states, and other jurisdictions where we conduct business. Any failure to comply with these rules and regulations could result in significant financial penalties and increase our cost of doing business.

• The occurrence or threat of extraordinary events, including domestic or international terrorist attacks, war, armed hostilities, or health-related epidemics, may disrupt our operations, decrease demand for our products, and increase our expenses.

Chemical-related assets may be at greater risk of future terrorist attacks than other possible targets in the United States and throughout the world. Federal legislation has imposed significant site security requirements, specifically on chemical manufacturing facilities. Federal regulations have also been enacted to increase the security of the transportation of hazardous chemicals in the United States. The enactment of further federal regulations to increase the security of the transportation of hazardous chemicals in the United States could increase our cost of doing business.

The occurrence of extraordinary events, including future terrorist attacks, the outbreak or escalation of war, armed hostilities, or a health-related epidemic cannot be predicted, but their occurrence can be expected to negatively affect the economy in general, as well as the markets for our products, and could result in production downtime. In addition, the damage from a direct attack on our facilities or other assets or facilities or other assets used by us could include loss of life or property damage, and our insurance coverage may not be sufficient to cover all of the damage incurred or securing coverage for these types of events may be prohibitively expensive.

We face risks related to our foreign operations that may negatively affect our business.

In 2023, sales to customers outside of the United States accounted for approximately 64% of consolidated net sales. We do business in all major regions of the world, some of which do not have stable economies or governments. In particular, we sell and market products in countries experiencing political and/or economic instability in the Middle East, Asia Pacific, Latin America, and Europe. Our international operations are subject to international business risks, including unsettled political conditions, war, expropriation, import and export restrictions, trade policies, increases in royalties, exchange controls, national and regional labor strikes, taxes, government royalties, inflationary or unstable economies, currency exchange rate fluctuations, and changes in laws and policies governing operations of foreign-based companies (such as restrictions on repatriation of earnings or proceeds from liquidated assets of foreign subsidiaries). The occurrence of any one or a combination of these factors may increase our costs or have other adverse effects on our business.

The insurance we maintain may not fully cover all potential exposures.

We maintain property, business interruption, and casualty insurance, but such insurance may not cover all risks associated with the hazards of our business and is subject to limitations, including deductibles and maximum liabilities covered. We may incur losses beyond the limits, or outside the coverage, of our insurance policies, including liabilities for environmental remediation. In the future, we may not be able to obtain coverage at current levels, and our premiums may increase significantly on coverage that we maintain.

Legislative and Regulatory Risks

• Our business could be adversely affected by current and future governmental regulation.

We are subject to regulation by local, state, federal, and foreign governmental authorities. In some circumstances, before we may sell certain products, these authorities must approve these products, our manufacturing processes, and our facilities. We are also subject to ongoing reviews of our products, manufacturing processes, and facilities by governmental authorities. Any delay in obtaining or failure to obtain or maintain these approvals would adversely affect our ability to introduce new products and generate sales from those products.

New laws and regulations, including climate change regulations and global tax legislation, may be introduced in the future and could result in additional compliance costs, which could prevent or inhibit the development, distribution, and sale of our products. If we fail to comply with applicable laws and regulations, we may be subject to civil remedies, including fines, injunctions, recalls, or seizures.

We are subject to the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act, and similar anti-bribery laws in other jurisdictions which generally prohibit companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or retaining business. We are also subject to export and import laws and regulations which restrict trading with embargoed or sanctioned countries and certain individuals. Although we have policies and procedures designed to facilitate compliance with these laws and regulations, our employees, contractors and agents may take actions in violation of our policies. Any such violation, even if prohibited by our policies, could adversely affect our business and/or our reputation.

• Legal proceedings and other claims could impose substantial costs on us.

We are involved in numerous administrative and legal proceedings that result from, and are incidental to, the conduct of our business. From time to time, these proceedings involve environmental, product liability, tetraethyl lead, premises asbestos liability, and other matters. See Item 3, "Legal Proceedings." There is no assurance that our available insurance will cover these claims, that our insurers will not challenge coverage for certain claims, or that final damage awards will not exceed our available insurance coverage.

At any given time, we are involved in claims, litigation, administrative proceedings, and investigations of various types in a number of jurisdictions involving potential environmental liabilities, including clean-up costs associated with waste disposal sites, natural resource damages, property damage, and personal injury. We cannot assure that the resolution of these environmental matters will not have an adverse effect on our results of operations, financial condition, or cash flows.

Environmental matters could have a substantial negative impact on our business.

As a manufacturer and distributor of chemical products, we are generally subject to extensive local, state, federal, and foreign environmental, safety, and health laws and regulations concerning, among other things, emissions to the air; discharges to land and water; the generation, handling, treatment, and disposal of hazardous waste and other materials; and remediation of contaminated soil, as well as surface and ground water. Our operations entail the risk of violations of those laws and regulations, many of which provide for substantial fines and criminal sanctions for violations. We believe that we comply in all material respects with laws, regulations, statutes, and ordinances protecting the environment, including those related to the discharge of materials. However, we cannot assure that we have been or will be at all times in compliance with all of these requirements.

In addition, these requirements, and the enforcement or interpretation of these requirements, may become more stringent in the future. Although we cannot predict the ultimate cost of compliance with any such requirements, the costs could be material. Noncompliance could subject us to material liabilities, such as government fines, damages arising from third-party lawsuits, or the suspension and potential cessation of non-compliant operations. We may also be required to make significant site or operational modifications at substantial cost. Future developments could also restrict or eliminate the use of or require us to make modifications to our products.

There may be environmental problems associated with our properties of which we are unaware. The discovery of environmental liabilities attached to our properties could have an adverse effect on our business even if we did not create or cause the problem.

We may also face liability arising from current or future claims alleging personal injury, product liability, or property damage due to exposure to chemicals or other hazardous substances, such as premises asbestos, at or from our facilities. We may also face liability for personal injury, product liability, property damage, natural resource damage, or clean-up costs for the alleged migration of contaminants or hazardous substances from our facilities or for future accidents or spills.

In some cases, we have been identified, and in the future may be identified, as a potentially responsible party (PRP) in connection with state and federal laws regarding environmental clean-up projects. As a PRP, we may be liable for a share of the costs associated with cleaning up hazardous waste sites, such as a landfill to which we may have sent waste.

The ultimate costs and timing of environmental liabilities are difficult to predict. Liability under environmental laws relating to contaminated sites can be imposed retroactively and on a joint and several basis. A liable party could be held responsible for all costs at a site, whether currently or formerly owned or operated, regardless of fault, knowledge, timing of the contamination, cause of the contamination, percentage of contribution to the contamination, or the legality of the original disposal. We could incur significant costs, including clean-up costs, natural resource damages, civil or criminal fines and sanctions, and third-party claims, as a result of past or future violations of, or liabilities under, environmental laws.

Financial and Economic Risks

 A substantial amount of indebtedness could adversely impact our business and limit our operational and financial flexibility.

We have incurred, and may in the future incur, substantial amounts of indebtedness to support our operations. To the degree that our indebtedness is at variable interest rates, increasing interest rates in the market will result in higher interest expense in our results of operations. Substantial amounts of indebtedness could, among other things, require us to dedicate a substantial portion of our cash flow to repaying and servicing our indebtedness, thus reducing the amount of funds available for other general corporate purposes; limit our ability to borrow additional funds necessary for working capital, capital expenditures or other general corporate purposes; and limit our flexibility in planning for, or reacting to, changes in our business.

Our ability to make payments on or refinance our indebtedness will depend on our ability to generate cash from operations in the future. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory, and other factors that are beyond our control.

We cannot guarantee that our business will generate sufficient cash flow from operations or that future borrowings will be available to us under our credit facilities in an amount sufficient to enable us to repay our debt, service our indebtedness, or to fund other liquidity needs. Furthermore, substantially all of our business is conducted through our subsidiaries, and we cannot guarantee that our subsidiaries will be able to distribute funds to us for these purposes.

We may need to refinance all or a portion of our indebtedness on or before maturity. We cannot guarantee that we will be able to refinance any of our indebtedness on commercially reasonable terms or at all.

Additionally, our debt instruments contain restrictive covenants. These covenants may constrain our activities and limit our operational and financial flexibility. Failure to comply with these covenants could result in an event of default.

 We are exposed to fluctuations in foreign exchange rates, which may adversely affect our results of operations.

We conduct our business in the local currency of many of the countries in which we operate. The financial condition and results of operations of our foreign operating subsidiaries are reported in the relevant local currency and then translated to U.S. Dollars at the applicable currency exchange rate for inclusion in our consolidated financial statements. Changes in exchange rates between these foreign currencies and the U.S. Dollar will affect the recorded amounts of our assets and liabilities, as well as our revenues, costs, and operating margins. The primary foreign currencies in which we have exchange rate fluctuation exposure are the European Union Euro, British Pound Sterling, Japanese Yen, Chinese Renminbi, Indian Rupee, Singapore Dollar, Mexican Peso, Australian Dollar, and Canadian Dollar. Exchange rates between these currencies and the U.S. Dollar have fluctuated significantly in recent years and may do so in the future.

• We could be required to make additional contributions to our pension plans, which may be underfunded due to any underperformance of equity markets.

Our pension plan asset allocation is predominantly weighted towards equities. Cash contribution requirements to our pension plans are sensitive to changes in our plans' actual return on assets. Reductions in our plans' return on assets due to poor performance of equity markets could cause our pension plans to be underfunded and require us to make additional cash contributions.

Acquisition and Investment Risks

• We may be unable to complete a proposed acquisition transaction due to a lack of regulatory approval or the failure of one or more parties to satisfy conditions to close. In addition, we may not be able to realize the expected benefits from acquisitions or from investments in our infrastructure, or it may take longer to realize those benefits than originally planned. The inability to achieve our objectives related to these activities could result in unanticipated expenses and losses.

As part of our business growth strategy, we intend to continue pursuing acquisitions and investing in our infrastructure. Our ability to implement these components of our growth strategy will be limited by our ability to identify appropriate acquisition or joint venture candidates; our ability to complete proposed transactions, which may be subject to, among other things, regulatory approval or the parties' satisfaction of conditions required for closing; and the availability of financial resources, including cash and borrowing capacity. When we acquire new businesses or invest in infrastructure improvements (for example, building new plant facilities), we consider the benefits we expect to realize and time frames over which we will realize those benefits. The expenses incurred in completing these types of activities, the time it takes to integrate the activities into our ongoing business, or our failure to realize the expected benefits from the activities in the planned time frames could result in unanticipated expenses and losses. The process of integrating acquired operations into our existing operations may result in unforeseen operating difficulties and may require significant financial resources that would otherwise be available for the ongoing development or expansion of existing operations.

In addition, our ability to realize the expected benefits from our acquisition of AMPAC is subject to several factors. These include our ability to retain key AMPAC personnel, our ability to maintain relationships with suppliers and customers of AMPAC, and our ability to integrate AMPAC into certain information technology systems, operational systems, procedures, or controls without disrupting its operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

Material Risks from Cybersecurity Threats

Our operations and other aspects of our business rely heavily on various information technology systems, some of which are managed by third parties. We face significant cybersecurity threats, which are continuously increasing in sophistication, including computer viruses, internal and external security breaches, and other cyberattacks. These threats could disrupt our operations, lead to the loss of confidential information (such as the personally identifiable information of individuals, including our employees), and hinder our ability to process transactions with customers, operate our manufacturing facilities, and accurately report transactions in a timely manner. To manage these cybersecurity risks, our organization leverages the National Institute of Standards and Technology (NIST) Cybersecurity Framework. We have implemented comprehensive policies and procedures that facilitate the timely identification and reporting of cyber incidents.

Additionally, we have established protective measures for the forensic analysis of cyber incidents. While we are proactive in our efforts to mitigate these threats through robust security processes and disaster recovery plans, the evolving nature of cybersecurity threats means that our systems may not always be able to identify or protect against a threat promptly or at all. As a result, there is a continuous risk of potential financial, legal, business, and reputational damage to our company stemming from cybersecurity threats.

We employ a number of people who are part of our Information Technology group and are dedicated to and responsible for assessing and managing cybersecurity threats. Our Information Technology Director, who has over 25 years of experience in information security serving in roles of increasing responsibility, works with our cybersecurity employees to set priorities and is responsible for cybersecurity oversight and the escalation of incidents with business impact to senior leadership based on our Information Security Incident Management Policy.

We utilize specialized third-party services and tools for identifying, protecting against, and detecting cyber incidents, and also partner with external cybersecurity experts and vendors to augment our internal security team. Through these third-party services, our detection capabilities include, but are not limited, to, real-time monitoring, intrusion detection systems, and advanced analytics to identify abnormal patterns of behavior. These third-party detection tools provide real-time alerts, log aggregation, and threat intelligence feeds, which are integrated into our incident response platform.

Additionally, we engage third-parties to conduct independent assessments of our cybersecurity posture that evaluate the efficiency and effectiveness of our detection capabilities, along with our response mechanisms, and overall risk management.

Third-party service providers are integral to our business operations and are incorporated into our enterprise-wide risk management program, which subjects the providers to rigorous vetting processes and ongoing oversight. We use specialized monitoring tools that evaluate the cybersecurity posture of our third-party providers using a cybersecurity scorecard. This allows us to continually assess the cybersecurity risk levels associated with these external partners.

Our approach to managing cybersecurity risks (including third-party risk) is part of a continuous improvement process, both in the context of cybersecurity and broader operational risk management. This ongoing process, which includes employee training, is aimed at routinely reviewing and, as necessary, improving, our oversight processes and tools to ensure they remain effective and resilient in their management of cybersecurity risk.

Material Impact of Cybersecurity Threats

While we have yet to experience a material cybersecurity event, we acknowledge the persistent and evolving nature of these threats, which have the potential to materially impact our business strategy, operations, and financial standing adversely. See Item 1A, "Risk Factors" under the operational risks section for more information. We maintain robust policies and procedures focused on cybersecurity incident management, ensuring timely communication and escalation to all relevant stakeholders. This enables faster response and effective communication, including public disclosure if a material cybersecurity event were to occur.

Board of Directors Oversight

The Board of Directors oversees risks related to cybersecurity, including the security of corporate information and the steps management is taking to monitor and control these risks. Management regularly briefs the Board on our cybersecurity risk profile, emerging threats, and the efficacy of our risk mitigation strategies, including our continuous improvement initiatives. These initiatives aim to enhance the resiliency of our cybersecurity program as well as our broader operational risk management strategies.

ITEM 2. PROPERTIES

Our principal operating properties are shown below. Unless indicated, we own the research, development, and testing facilities, as well as the manufacturing and distribution properties, which primarily support the petroleum additives business segment.

Research, Development, and Testing Richmond, Virginia

Bracknell, England Tsukuba, Japan Ashland, Virginia Suzhou, China

Manufacturing and Distribution Feluy, Belgium (lubricant additives; also storage and distribution)

Houston, Texas (lubricant and fuel additives; also storage and distribution) Jurong Island, Singapore (lubricant and fuel additives; leased land)

Port Arthur, Texas (lubricant additives)

Rio de Janeiro, Brazil (lubricant and fuel additives storage and

distribution; equipment is owned; building is leased) San Juan del Rio, Mexico (lubricant additives)

Sauget, Illinois (*lubricant additives*) Suzhou, China (*storage and distribution*)

We own our corporate headquarters located in Richmond, Virginia, and generally lease our regional and sales offices in a number of locations worldwide.

NewMarket Development manages the real property we own in Richmond, Virginia consisting of approximately 50 acres. Our corporate offices are included in this acreage, as well as a research and testing facility and several acres dedicated to other uses. We are exploring various development opportunities for portions of the property as the demand warrants. This effort is ongoing in nature.

Production Capacity

We believe our plants and supply agreements are sufficient to meet expected sales levels. Operating rates of the plants vary with product mix and normal sales swings. We believe that our facilities are well maintained and in good operating condition.

ITEM 3. LEGAL PROCEEDINGS

We are involved in legal proceedings that are incidental to our business and may include administrative or judicial actions. Some of these legal proceedings involve governmental authorities and relate to environmental matters. For further information, see the Environmental section in Note 20.

While it is not possible to predict or determine with certainty the outcome of any legal proceeding, we believe the outcome of any of these proceedings, or all of them combined, will not result in a material adverse effect on our consolidated results of operations, financial condition, or cash flows.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

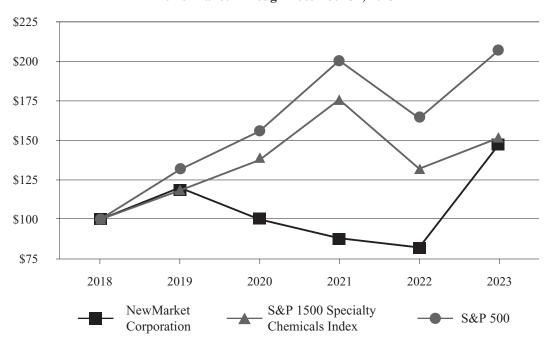
Our common stock, with no par value, has traded on the New York Stock Exchange (NYSE) under the symbol "NEU" since June 21, 2004 when we became the parent holding company of Ethyl, Afton, NewMarket Services, NewMarket Development, and their subsidiaries. We had 1,797 shareholders of record as of January 31, 2024.

On October 28, 2021, our Board of Directors approved a share repurchase program authorizing management to repurchase up to \$500 million of NewMarket's outstanding common stock until December 31, 2024, as market conditions warrant and covenants under our existing debt agreements permit. We may conduct the share repurchases in the open market, in privately negotiated transactions, through block trades, or pursuant to trading plans intended to comply with Rule 10b5-1 and/or Rule 10b-18 of the Securities Exchange Act of 1934. The repurchase program does not require the Company to acquire any specific number of shares and may be terminated or suspended at any time. At December 31, 2023, approximately \$231 million remained available under the 2021 authorization. There were no purchases during the fourth quarter of 2023 under this authorization.

Cash dividends declared and paid totaled \$8.85 per share for the year ended December 31, 2023 and \$8.40 per share for the year ended December 31, 2022. The declaration and payment of dividends is subject to the discretion of our Board of Directors. Future dividends will depend on various factors, including our financial condition, earnings, cash requirements, legal requirements, restrictions in agreements governing our outstanding indebtedness, and other factors deemed relevant by our Board of Directors.

The performance graph of the five-year cumulative total return on our common stock as compared to chemical companies in the S&P 1500 Specialty Chemicals Index and the S&P 500 is shown below. The graph assumes \$100 invested on the last day of December 2018, and the reinvestment of all dividends. The graph is based on historical data and is not intended to be a forecast or indication of future performance of our common stock.

Performance Graph Comparison of Five-Year Cumulative Total Return Performance Through December 31, 2023



	December 31,					
	2018	2019	2020	2021	2022	2023
NewMarket Corporation	\$100.00	\$120.02	\$100.22	\$ 88.29	\$ 82.40	\$147.58
S&P 1500 Specialty Chemicals Index	100.00	118.29	137.60	175.78	132.06	151.74
S&P 500	100.00	131.49	155.68	200.37	164.08	207.21

The graph and table above are not deemed "filed" with the SEC for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor are they incorporated by reference into other filings made by us with the SEC.

ITEM 6. RESERVED

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

The following discussion, as well as other discussions in this Annual Report on Form 10-K, contains forward-looking statements about future events and expectations within the meaning of the Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements on our current expectations and projections about future results. When we use words in this document such as "anticipates," "intends," "plans," "believes," "estimates," "projects," "expects," "should," "could," "may," "will," and similar expressions, we do so to identify forward-looking statements. Examples of forward-looking statements include, but are not limited to, statements we make regarding future prospects of growth in the petroleum additives market, other trends in the petroleum additives market, our ability to maintain or increase our market share, our future capital expenditure levels, and our future financial results.

We believe our forward-looking statements are based on reasonable expectations and assumptions, within the bounds of what we know about our business and operations. However, we offer no assurance that actual results will not differ materially from our expectations due to uncertainties and factors that are difficult to predict and beyond our control.

Factors that could cause actual results to differ materially from expectations include, but are not limited to, the availability of raw materials and distribution systems; disruptions at production facilities, including single-sourced facilities; hazards common to chemical businesses; the ability to respond effectively to technological changes in our industry; failure to protect our intellectual property rights; sudden, sharp, or prolonged raw material price increases; competition from other manufacturers; current and future governmental regulations; the loss of significant customers; failure to attract and retain a highly-qualified workforce; an information technology system failure or security breach; the occurrence or threat of extraordinary events, including natural disasters, terrorist attacks, wars, and health-related epidemics; risks related to operating outside of the United States; political, economic, and regulatory factors concerning our products; the impact of substantial indebtedness on our operational and financial flexibility; the impact of fluctuations in foreign exchange rates; resolution of environmental liabilities or legal proceedings; limitation of our insurance coverage; our inability to realize expected benefits from investment in our infrastructure or from acquisitions, or our inability to successfully integrate acquisitions into our business; and the underperformance of our pension assets resulting in additional cash contributions to our pension plans. Risk factors are discussed in Item 1A. "Risk Factors."

You should keep in mind that any forward-looking statement made by us in this discussion or elsewhere speaks only as of the date on which we make it. New risks and uncertainties arise from time to time, and it is impossible for us to predict these events or how they may affect us. We have no duty to, and do not intend to, update or revise the forward-looking statements in this discussion after the date hereof, except as may be required by law. In light of these risks and uncertainties, any forward-looking statement made in this discussion or elsewhere, might not occur.

OVERVIEW

When comparing the results of the petroleum additives segment for 2023 with 2022, net sales were 2.4% lower resulting from a decrease in product shipments and an unfavorable foreign currency impact, which were mostly offset by higher selling prices. Petroleum additives operating profit was 36.0% higher when comparing 2023 with 2022, primarily reflecting the selling prices, including favorable product mix, partially offset by lower product shipments and higher raw material and operating costs. During 2023, our shipments were impacted by the overall global economic weakness and inventory rationalization which persists in the chemical industry.

While we have experienced improvement in the supply chain disruptions which impacted the chemicals industry over the past several years, we remain challenged by the ongoing inflationary environment impacting us, including increased raw material and operating costs. During this period, we have remained focused on managing our operating costs, our inventory levels, and our portfolio profitability, while continuing our investment in technology.

Despite the challenging economic environment, our financial position remains strong. We have sufficient access to capital, if needed, and do not anticipate any issues with meeting the covenants for all our debt agreements for the foreseeable future.

Our operations generate cash that is in excess of the needs of the business. We continue to invest in and manage our business for the long-term with the goal of helping our customers succeed in their marketplaces. Our investments continue to be in organizational talent, technology development and processes, and global infrastructure.

RESULTS OF OPERATIONS

Management's discussion and analysis of our results of operations is presented below for the comparative periods of 2023 versus 2022. The discussion and analysis of our results of operations for 2022 compared to 2021 is available in Item 7 of our 2022 Annual Report on Form 10-K.

Net Sales

Our consolidated net sales for 2023 amounted to \$2.7 billion, a decrease of \$66 million, or 2.4% from 2022.

No single customer accounted for 10% or more of our total net sales in 2023, 2022, or 2021.

The following table shows net sales by segment and product line for each of the last three years.

	Years Ended December 31,		
(in millions)	2023	2022	2021
Petroleum additives			
Lubricant additives	\$2,296	\$2,342	\$1,999
Fuel additives	394	412	345
Total	2,690	2,754	2,344
All other	8	11	12
Consolidated revenue	\$2,698	\$2,765	\$2,356

Petroleum Additives - The regions in which we operate include North America (the United States and Canada), Latin America (Mexico, Central America, and South America), Asia Pacific, and the Europe/Middle East/Africa/India (EMEAI) region. The percentage of net sales being generated in the regions has remained fairly consistent over the past three years, with some limited fluctuation due to various factors, including the impact of regional economic trends. In 2023, North America represented approximately 40% of our petroleum additives net sales, while EMEAI contributed approximately 30%, Asia Pacific approximately 20%, and Latin America the remaining amount. As shown in the table above, lubricant additives net sales and fuel additives net sales compared to total petroleum additives net sales has remained substantially consistent over the past three years.

Petroleum additives net sales for 2023 of \$2.7 billion were approximately 2.4% lower than 2022 levels. The decrease was across all regions. The Asia Pacific region represented approximately 62% of the petroleum additives decrease in net sales, EMEAI represented approximately 15%, the Latin America region represented approximately 13%, and the North America region represented approximately 10%.

The approximate components of the petroleum additives decrease in net sales of \$64 million when comparing 2023 to 2022 are shown below in millions.

Net sales for the year ended December 31, 2022	\$2,754
Lubricant additives shipments	(272)
Fuel additives shipments	(45)
Selling prices	261
Foreign currency impact, net	(8)
Net sales for the year ended December 31, 2023	\$2,690

When comparing petroleum additives net sales for 2023 with 2022, both lubricant additives and fuel additives shipments were lower, along with an unfavorable foreign currency impact, which were mostly offset by higher selling prices. The United States Dollar strengthened against all of the major currencies in which we transact, except for the Euro, resulting in the unfavorable impact to net sales for the 2023 and 2022 comparison.

On a worldwide basis, the volume of product shipments for petroleum additives decreased 10.7% when comparing 2023 with 2022, with decreases in both lubricant additives and fuel additives shipments. Lubricant additives represented most of the decrease in petroleum additives shipments and was across all regions with North America, EMEAI, and Asia Pacific each contributing about 30% of the decrease, and Latin America contributing the remaining amount. The decrease in fuel additives shipments was across all regions except for EMEAI, which had a small increase. Most of the decrease in fuel additives shipments was in the North America region. During 2023, our shipments were impacted by the overall global economic weakness and inventory rationalization which persists in the chemical industry.

All Other - The "All other" category includes the operations of the antiknock compounds business, as well as certain contracted manufacturing and related services associated with Ethyl and did not have a material impact to consolidated net sales when comparing 2023 and 2022.

Segment Operating Profit

NewMarket evaluates the performance of the petroleum additives business based on segment operating profit. NewMarket Services expenses are charged to NewMarket and each subsidiary pursuant to services agreements between the companies. Depreciation on segment property, plant, and equipment, as well as amortization of segment intangible assets and lease right-of-use assets, is included in segment operating profit.

The following table reports segment operating profit for the last three years. A reconciliation of segment operating profit to income before income tax expense is in Note 4.

	December 31,		
(in millions)	2023	2022	2021
Petroleum additives	\$514	\$378	\$281
All other	\$ (5)	\$ (2)	\$ <u>(1)</u>

Vears Ended

Petroleum Additives - Petroleum additives segment gross profit, as well as segment operating profit, increased \$136 million when comparing 2023 to 2022. Cost of goods sold as a percentage of net sales was 71.2% in 2023 and 76.8% in 2022. The operating profit margin was 19.1% in 2023 and 13.7% in 2022. While operating margins will fluctuate from quarter to quarter due to multiple factors, we believe the fundamentals of our business and industry as a whole are unchanged.

When comparing 2023 and 2022, both gross profit and operating profit included the favorable impact of significantly higher selling prices, including favorable product mix, which were partially offset by lower shipments, higher raw material costs, and higher operating costs. We remain challenged by the ongoing inflationary environment impacting us, including higher raw material and operating costs in the market compared to 2022. We are maintaining our focus on managing our operating costs, our inventory levels, and our portfolio profitability while continuing our investment in technology.

Petroleum additives selling, general, and administrative expenses (SG&A) increased by \$2 million, or 1.6%, in 2023 compared to 2022. SG&A as a percentage of net sales was 4.6% in 2023 and 4.4% in 2022. Our SG&A costs are primarily personnel-related and include salaries, benefits, and other costs associated with our workforce, including travel-related expenses. While personnel-related costs fluctuate from year to year, there were no significant changes in the drivers of these costs when comparing 2023 and 2022.

Our investment in petroleum additives research, development, and testing (R&D) decreased approximately \$2 million when comparing 2023 with 2022. As a percentage of net sales, R&D was 5.1% in both 2023 and 2022. Our R&D investments reflect our efforts to support the development of solutions that meet our customers' needs, meet new and evolving standards, and support our expansion into new product areas. Our approach to R&D investments, as it is with SG&A, is one of purposeful spending on programs to support our current product base and to ensure that we develop

products to support our customers' programs in the future. R&D investments include personnel-related costs, as well as costs for internal and external testing of our products. Substantially all investments in new product development are incurred in the United States and the United Kingdom (U.K.), with approximately 70% of total R&D attributable to the North America and EMEAI regions. The remaining R&D is attributable to the Asia Pacific and Latin America regions and represents customer technology support services in those regions. All of our R&D is related to the petroleum additives segment.

The following discussion references certain captions on the Consolidated Statements of Income.

Interest and Financing Expenses

Interest and financing expenses were \$37 million in 2023 and \$35 million in 2022. The increase in interest and financing expense between 2023 and 2022 resulted primarily from a higher average interest rate, which was partially offset by lower average outstanding debt.

Other Income (Expense), Net

Other income (expense), net was income of \$43 million in 2023 and \$35 million in 2022. The amounts for both periods included the components of net periodic benefit cost (income), except for service costs, from defined benefit pension and postretirement plans. See Note 17 for further information on total periodic benefit cost (income). The 2022 amount also included a loss on marketable securities of \$3 million.

Income Tax Expense

Income tax expense was \$100 million in 2023 and \$68 million in 2022. The effective tax rate was 20.5% in 2023 and 19.6% in 2022. When comparing 2023 and 2022, income tax expense increased \$28 million due to the higher income before income taxes and \$4 million from the higher effective tax rate. The increase in the effective tax rate for the year was primarily the result of an increase in our state tax expense.

On October 8, 2021, almost all members of the Organisation for Economic Co-operation and Development (OECD) reached an agreement on a two-pillar approach to international tax reform, including the establishment of a 15% global minimum tax for large multinational entities. Several jurisdictions in which we operate have adopted or are in the process of adopting this global minimum tax, with planned effective dates in 2024 or 2025. We are continuing to monitor the legislation in these jurisdictions and any potential impact to our effective tax rate and related income tax liabilities in future years.

CASH FLOWS DISCUSSION

We generated cash from operating activities of \$577 million in 2023 and \$109 million in 2022.

During 2023, we used the \$577 million of cash generated from operating activities to make net payments of \$361 million on our revolving credit facility, pay dividends of \$85 million, fund capital expenditures of \$48 million, and repurchase 119,075 shares of our common stock for \$43 million. Cash flows from operating activities included an increase of \$134 million from lower working capital requirements, which is further discussed in the Working Capital section below, and a decrease of \$10 million for cash contributions to our pension and postretirement plans.

During 2022, we used the \$109 million of cash generated from operations along with the proceeds of \$373 million from the sale of marketable securities, \$213 million of borrowings under the revolving credit facility, and \$15 million of cash on hand to redeem \$350 million of our 4.10% senior notes, repurchase \$207 million of our common stock, pay dividends of \$84 million, and fund \$56 million of capital expenditures. Cash flows from operating activities included a decrease of \$205 million from higher working capital requirements and a decrease of \$10 million for cash contributions to our pension and postretirement plans.

FINANCIAL POSITION AND LIQUIDITY

Cash

At December 31, 2023, we had cash and cash equivalents of \$112 million as compared to \$69 million at the end of 2022.

Cash and cash equivalents held by our foreign subsidiaries amounted to approximately \$87 million at December 31, 2023 and \$65 million at December 31, 2022. Periodically, we repatriate cash from our foreign subsidiaries to the United States through intercompany dividends and loans. We do not anticipate significant tax consequences of future distributions of foreign earnings.

A portion of our foreign cash balances is associated with earnings that we have asserted are indefinitely reinvested. We plan to use these indefinitely reinvested earnings to support growth outside of the United States through funding of operating expenses, research and development expenses, capital expenditures, and other cash needs of our foreign subsidiaries.

Debt

A summary of our debt instruments follows. A full discussion is in Note 13.

2.70% Senior Notes - On March 18, 2021, we issued \$400 million aggregate principal amount of 2.70% senior notes due 2031 at an issue price of 98.763%. We used the net proceeds from the offering for the repayment or redemption of our 4.10% senior notes and for general corporate purposes. We incurred financing costs in 2021 of approximately \$4 million related to the 2.70% senior notes, which are being amortized over the term of the notes. We were in compliance with all covenants under the indenture governing the 2.70% senior notes as of December 31, 2023 and December 31, 2022.

3.78% Senior Notes - On January 4, 2017, we issued \$250 million in senior unsecured notes in a private placement with The Prudential Insurance Company of America and certain other purchasers. These notes bear interest at 3.78% and mature on January 4, 2029. Interest is payable semiannually. Principal payments of \$50 million are payable annually beginning on January 4, 2025. We have the right to make optional prepayments on the notes at any time, subject to certain limitations. We were in compliance with all covenants under the 3.78% senior notes as of December 31, 2023 and December 31, 2022.

Revolving Credit Facility - On March 5, 2020, NewMarket and certain foreign subsidiary borrowers entered into a Credit Agreement (the Credit Agreement) with a term of five years. The Credit Agreement provided for a \$900 million, multicurrency revolving credit facility with a \$500 million sublimit for foreign currency borrowings, a \$50 million sublimit for letters of credit, and a \$20 million sublimit for swingline loans. The Credit Agreement included an expansion feature which allowed us, subject to certain conditions, to request an increase in the aggregate amount of the revolving credit facility or obtain incremental term loans in an amount up to \$425 million. NewMarket's obligations under the Credit Agreement were unsecured and the obligations of foreign subsidiary borrowers were fully and unconditionally guaranteed by NewMarket. The revolving credit facility was scheduled to mature on March 5, 2025. Effective January 11, 2023, the revolving credit facility was amended to eliminate the use of LIBOR on borrowings, replacing it with SOFR.

There were no outstanding borrowings under the revolving credit facility at December 31, 2023, compared to \$361 million outstanding borrowings at December 31, 2022. Outstanding letters of credit amounted to \$2 million at both December 31, 2023 and December 31, 2022, resulting in the unused portion of the credit facility amounting to \$898 million at December 31, 2023 and \$537 million at December 31, 2022.

The average interest rate for borrowings under the credit facility was 6.2% during 2023 and 3.5% during 2022.

The Credit Agreement contained financial covenants that required NewMarket to maintain a consolidated Leverage Ratio (as defined in the Credit Agreement) of no more than 3.75 to 1.00 except during an Increased Leverage Period (as defined in the Credit Agreement). At December 31, 2023, the Leverage Ratio was 1.13. We were in compliance with all covenants under the revolving credit facility at December 31, 2023 and at December 31, 2022.

On January 22, 2024, we entered into a new five-year, \$900 million revolving credit facility that replaced the facility discussed above and also entered into a two-year, \$250 million unsecured term loan. This term loan gave us additional flexibility to repay borrowings under our revolving credit facility and support our business needs. See Note 23 for additional information.

Other Borrowings - Three of our subsidiaries, one each in the U.K., Singapore, and China, have access to separate short-term lines of credit of \$10 million. There was no activity on these lines of credit in 2023 or 2022.

We had long-term debt of \$644 million at December 31, 2023 and \$1.0 billion at December 31, 2022. The decrease resulted from the net repayments of \$361 million on the revolving credit facility during 2023.

As a percentage of total capitalization (total long-term debt and shareholders' equity), our total long-term debt percentage decreased from 56.8% at the end of 2022 to 37.4% at the end of 2023. The change in the percentage was primarily the result of the decrease in outstanding revolving credit facility borrowings, along with an increase in shareholders' equity. The change in shareholders' equity primarily reflects our earnings, an increase in the funded position of our defined benefit plans, and the impact of the foreign currency translation adjustment partially offset by stock repurchases and dividend payments. Normally, we repay any outstanding long-term debt with cash from operations or refinancing activities.

Working Capital

Including cash and cash equivalents and the impact of foreign currency on the balance sheet, at December 31, 2023, we had working capital of \$675 million, resulting in a current ratio of 2.85 to 1. Our working capital at December 31, 2022 on the same basis was \$768 million, resulting in a current ratio of 2.81 to 1.

The most significant change in working capital since December 31, 2022 included decreases in trade and other accounts receivable, inventories, accounts payable, and accrued expenses. In addition to these items, cash and cash equivalents increased as outlined in the cash flows discussion above.

The decrease in trade and other accounts receivable primarily represents lower sales levels along with the refund of value added taxes at some of our foreign subsidiaries. The decrease in inventories reflects our planned inventory rationalization in response to lower demand and inventory rationalization by our customers. The decrease in accounts payable is primarily the result of the same inventory rationalization and lower production levels. The change in accrued expenses reflects normal adjustments for rebate payments to customers.

Capital Expenditures

Capital expenditures were \$48 million for 2023 and \$56 million for 2022. We estimate capital expenditures in 2024 will be in the range of \$50 million to \$60 million as we anticipate spending on several improvements to our manufacturing and R&D infrastructure around the world. We expect to continue to finance capital spending through cash provided from operations, as well as with borrowing available under our revolving credit facility.

Environmental Expenses

We spent approximately \$41 million in 2023 and \$37 million in 2022 for ongoing environmental operating and clean-up costs, excluding depreciation of previously capitalized expenditures. These environmental operating and clean-up expenses are included in cost of goods sold. We expect to continue to fund these costs through cash provided by operations.

Liquidity and Contractual Obligations

We have both current and long-term obligations that have known payment streams and are discussed throughout this Annual Report on Form 10-K. These include debt-related obligations, lease obligations, purchase commitments, including those for property, plant, and equipment, contributions to pension and postretirement benefit plans, and environmental dismantling and decontamination.

The debt-related contractual obligations include both principal payments on outstanding long-term debt and the related interest payments. The maturity dates and interest rates, as well as information on the repayment of the principal on our long-term debt is detailed above in the Debt section, as well as in Note 13. At December 31, 2023, all of our long-term debt was at fixed rates, except for the revolving credit facility which had no outstanding borrowings. Interest is paid semi-annually on our fixed rate long-term debt agreements. See Note 23 for additional information on our debt structure in 2024.

Note 16 provides information by year on our lease obligations which have commenced, as well as any lease commitments which have not yet commenced. Note 17 includes information on contributions to pension and postretirement benefit plans, as well as benefit payments to participants. Benefit payments under these plans are predominantly paid from assets held in trust. Further information on purchase commitments, including those for purchases of property, plant, and equipment, is in Note 20.

The annual operating expenses and capital expenditures associated with compliance with environmental, health, and safety regulations are included in Item 1, Governmental and Environmental Regulations. In addition to these costs, there are expected cash flows for dismantling and decontamination of environmental sites. At December 31, 2023, these costs were estimated at approximately \$1 million in each of 2024 through 2028 and \$9 million thereafter.

We expect that cash from operations, together with borrowing available under our credit facilities, will continue to be sufficient for our operating needs and planned capital expenditures for both a short-term and long-term horizon.

Pension and Postretirement Benefit Plans

Our U.S. and foreign benefit plans are discussed separately below. The information applies to all of our U.S. benefit plans. Our foreign plans are quite diverse, and the actuarial assumptions used by the various foreign plans are based upon the circumstances of each particular country and retirement plan. We use a December 31 measurement date to determine our net periodic benefit cost (income) for our pension and postretirement benefit plans and related financial disclosure information. Additional information on our pension and postretirement plans is in Note 17.

U.S. Pension and Postretirement Benefit Plans - The average remaining service period of active participants for our U.S. plans is 13.1 years, while the average remaining life expectancy of inactive participants is 22.6 years. We utilize the sex distinct Pri-2012 table with separate rates for annuitants, non-annuitants, and contingent annuitants, projected generationally using Scale MP-2021 in determining the impact of the U.S. benefit plans on our financial statements.

Investment Return Assumptions and Asset Allocation - We periodically review our assumptions for the long-term expected return on pension plan assets. As part of the review and to develop expected rates of return, we considered an analysis of expected returns based on the U.S. plans' asset allocation as of both January 1, 2024 and January 1, 2023. This analysis reflects our expected long-term rates of return for each significant asset class or economic indicator. The range of returns developed relies both on forecasts and on broad-market historical benchmarks for expected return, correlation, and volatility for each asset class. The asset allocation for our U.S. pension plans is predominantly weighted toward equities. Through the ongoing monitoring of our investments and review of market data, we have determined that we should maintain the expected long-term rate of return for our U.S. pension plans at 8.0% at December 31, 2023.

An actuarial gain on the assets occurred during 2023 as the actual investment return for all of our U.S. qualified pension plans exceeded the expected return by approximately \$47 million in 2023. An actuarial loss on the assets occurred during 2022 as the actual investment return for all of our U.S. qualified pension plans was less than the expected return by \$149 million. Investment gains and losses are recognized in earnings on an amortized basis over a period of 5 years. The amortization of the actuarial net gain is expected to be approximately \$2 million in 2024 resulting primarily from the actuarial gain related to the investment gains on plan assets, which was partially offset by actuarial losses associated with the decrease in the discount rate. We expect that there will be continued volatility in net periodic benefit cost (income) for our pension plans as actual investment returns vary from the expected return, but we continue to believe the potential long-term benefits justify the risk premium for equity investments.

At December 31, 2023, our expected long-term rate of return on our postretirement plans was 4.0%. This rate varies from the pension rate of 8.0% primarily because of the difference in investment of plan assets. The assets of the postretirement plan are held in an insurance contract, which results in a lower assumed rate of investment return.

We expect to have net periodic benefit income for our pension and postretirement plans during 2024, as the expected return on assets and amortization is higher than the offsetting pension costs. Net periodic benefit cost (income) for the pension and the life insurance portion of postretirement plans are sensitive to changes in the expected return on assets. For example, decreasing the expected rate of return by 100 basis points to 7.0% for pension assets and 3.0% for postretirement benefit assets (while holding other assumptions constant) would reduce the forecasted 2024 income for our U.S. pension and postretirement plans by approximately \$7 million. Similarly, a 100 basis point increase in the expected rate of return to 9.0% for pension assets and 5.0% for postretirement benefit assets (while holding other assumptions constant) would increase forecasted 2024 pension and postretirement income by \$7 million.

<u>Discount Rate Assumption</u> - We develop the discount rate assumption by determining the single effective discount rate for a unique hypothetical portfolio constructed from investment-grade bonds that, in the aggregate, match the projected cash flows of each of our retirement plans. The discount rate is developed based on the hypothetical portfolio on the last day of December. The discount rate at December 31, 2023 was 5.375% for all plans.

Net periodic benefit cost (income) for pension and postretirement benefit plans is also sensitive to changes in the discount rate. For example, decreasing the discount rate by 100 basis points to 4.375% (while holding other assumptions constant) would reduce the forecasted 2024 income for our U.S. pension and postretirement benefit plans by approximately \$4 million. A 100 basis point increase in the discount rate to 6.375% (while holding other assumptions constant) would increase forecasted 2024 pension and postretirement benefit income by approximately \$4 million.

Rate of Projected Compensation Increase - We have maintained our rate of projected compensation increase at December 31, 2023 at 3.5%. The rate assumption was based on an analysis of our projected compensation increases for the foreseeable future.

<u>Liquidity</u> - Cash contribution requirements to the pension plan are sensitive to changes in assumed interest rates and investment gains or losses in the same manner as pension expense. While we do not expect to make a cash contribution to our U.S. qualified pension plans, we expect our aggregate cash contributions to the U.S. pension plans will be approximately \$3 million in 2024. We expect our contributions to the postretirement benefit plans will be approximately \$1 million in 2024.

Foreign Pension Benefit Plans - Our foreign pension plans are quite diverse. The following information applies only to our U.K. pension plan, which represents the majority of the amounts recorded in our financial statements for our foreign pension plans. The average remaining service period of active participants for our U.K. plan is 15 years, while the average remaining life expectancy of inactive participants is 23 years. In determining the impact of the U.K. pension plans on our financial statements, we utilize the S3PxA (Light) mortality tables weighted by 103% for males and 106% for females and allow for future projected improvements in life expectancy in line with the CMI 2022 model with the core smoothing parameter, an initial addition to mortality improvements of 0.3% per year, and an experience weighting of 0% on 2020 and 2021 data and 20% on 2022 data, with a long-term rate of improvement of 1.25% per year for males and 1.00% per year for females based on the membership of the plan.

Investment Return Assumptions and Asset Allocation - We periodically review our assumptions for the long-term expected return on the U.K. pension plan assets. The expected long-term rate of return is based on both the asset allocation and yields available in the U.K. markets.

The target asset allocation in the U.K. is 40% in pooled equities funds, 40% in pooled government bonds, and 20% in pooled diversified growth funds. The actual allocation at the end of 2023 was 49% in pooled equities funds, 29% in pooled government bonds, 21% in pooled diversified growth funds, and 1% in cash. Based on the actual asset allocation and the expected yields available in the U.K. markets, the expected long-term rate of return for the U.K. pension plan was 6.9% at December 31, 2023.

An actuarial gain on the assets occurred during 2023 as the actual investment return exceeded the expected investment return by approximately \$4 million. An actuarial loss on the assets occurred during 2022 as the actual investment return was less than the expected investment return by approximately \$44 million. An actuarial loss of \$3 million occurred during 2023 and an actuarial gain of \$81 million occurred during 2022 on plan liabilities primarily due to changes in the assumptions. Investment and liability gains and losses are recognized in earnings on an amortized basis over a period of years. The combined investment gain and actuarial loss on plan liabilities results in no expected amortization in 2024 We expect that there will be continued volatility in the net periodic benefit cost (income) for our U.K. pension plan as actual investment returns vary from the expected return, but we continue to believe the potential benefits justify the risk premium for the target asset allocation.

We expect to have pension income during 2024 related to our U.K. plan, as the expected return on assets is higher than the offsetting pension costs. Net periodic benefit cost (income) for the U.K. pension plan is sensitive to changes in the expected return on assets. For example, decreasing the expected rate of return by 100 basis points to 5.9% (while holding other assumptions constant) would decrease the forecasted 2024 income for our U.K. pension plan by approximately \$2 million. Similarly, a 100 basis point increase in the expected rate of return to 7.9% (while holding other assumptions constant) would increase forecasted 2024 pension income by approximately \$2 million.

<u>Discount Rate Assumption</u> - We utilize a yield curve based on AA-rated corporate bond yields in developing a discount rate assumption. The yield appropriate to the duration of the U.K. plan liabilities is then used. The discount rate at December 31, 2023 was 4.55%.

Net periodic benefit cost (income) for the U.K. pension plan is also sensitive to changes in the discount rate. For example, decreasing the discount rate by 100 basis points to 3.55% (while holding other assumptions constant) would decrease the forecasted 2024 income for our U.K. pension plans by approximately \$500 thousand. A 100 basis point increase in the discount rate to 5.55% (while holding other assumptions constant) would increase forecasted 2024 pension income by approximately \$400 thousand.

<u>Rate of Projected Compensation Increase</u> - Our rate of projected compensation increase at December 31, 2023 is 3.5%. The rate assumption was based on an analysis of our projected compensation increases for the foreseeable future.

<u>Liquidity</u> - Cash contribution requirements to the U.K. pension plan are sensitive to changes in assumed interest rates and investment gains or losses. We expect our aggregate U.K. cash contributions will be approximately \$4 million in 2024.

OTHER MATTERS

On January 16, 2024, we completed the acquisition of AMPAC Intermediate Holdings, LLC, the ultimate parent company of American Pacific Corporation (AMPAC), for approximately \$700 million. AMPAC manufactures and sells critical performance additives used in solid rocket motors for space launch and military defense applications. The acquisition was funded by cash on hand and borrowings under our 2020 revolving credit facility. The additional borrowing associated with the AMPAC acquisition increased our leverage, but we anticipate that will be reduced by the end of 2024. See Note 23 for additional information.

OUTLOOK

Our goal is to provide a 10% compounded return per year for our shareholders over any ten-year period (defined by earnings per share growth plus dividend yield), although we may not necessarily achieve a 10% return each year. We continue to have confidence in our customer-focused strategy and approach to the market. We believe the fundamentals of how we run our business - a long-term view, safety-first culture, customer-focused solutions, technology-driven product offerings, and world-class supply chain capability - will continue to be beneficial for all of our stakeholders over the long term.

We expect our petroleum additives segment to experience impacts to its operating performance during 2024 due to the uncertain economic environment in which we operate, as we continue to see challenges with inflationary trends impacting our operating costs and raw material prices. As a result, we will continue to focus on cost control and operating profit margin recovery throughout the year. We expect over the long-term that the petroleum additives market will grow annually up to 2%. We plan to exceed that growth rate.

Over the past several years we have made significant investments in our business as the industry fundamentals remain positive. These investments have been and will continue to be in organizational talent, technology development and processes, and global infrastructure, consisting of technical centers, production capability and geographic expansion. We intend to utilize these investments to improve our ability to deliver the solutions that our customers value, expand our global reach, and enhance our operating results. We will continue to invest in our capabilities to provide even better value, service, technology, and customer solutions.

We anticipate continued strength in our petroleum additives segment in 2024 and also look forward to the integration of AMPAC into our business in the coming year. We expect AMPAC will be accretive to our net income in 2024.

Our business generates significant amounts of cash beyond its operational needs. We regularly review our many internal opportunities to utilize excess cash from technological, geographic, production capability, and product line perspectives. We believe our capital spending is creating the capability we need to grow and support our customers worldwide, and our research and development investments are positioning us well to provide added value to our customers.

While our recent AMPAC acquisition is outside of our core petroleum additives business, we believe it is an excellent opportunity to provide long-term value for our shareholders. Nonetheless, our primary focus in the acquisition area remains on the petroleum additives industry. It is our view that the petroleum additives industry will provide the greatest opportunity for solid returns on our investments while minimizing risk. We remain focused on this strategy and will evaluate any future opportunities. We will continue to evaluate all alternative uses of cash to enhance shareholder value, including stock repurchases and dividends.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The following discussion highlights some of the more critical areas where a significant change in facts and circumstances in our operating and financial environment could cause a change in future reported financial results.

Income Taxes

We file United States, foreign, state, and local income tax returns. Significant judgment is required in determining our worldwide provision for income taxes and recording the related tax assets and liabilities. Any significant impact as a result of changes in underlying facts, law, tax rates, or tax audits could lead to adjustments to our income tax expense, effective tax rate, financial position, or cash flow.

Deferred income taxes are provided for the estimated income tax effect of temporary differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities, as well as for net operating losses and tax credit carryforwards. When recording these deferred tax assets and liabilities, we must estimate the tax rates we expect will apply to taxable income in the periods in which the deferred tax liability or asset is expected to be settled or realized. In addition, we may record valuation allowances to reduce deferred tax assets if it is more likely than not that some portion or all of the deferred tax assets will not be realized. Judgment is required as we consider the scheduled reversal of deferred tax assets and liabilities, projected future taxable income, and tax planning strategies in making this assessment. If our estimates and assumptions change from those used when we recorded deferred tax assets and liabilities, the effect on our results of operations and financial position could be material.

The income tax returns for our entities in the United States and in foreign jurisdictions are open for examination by tax authorities. We assess our income tax positions and record a liability for all years open for examination based upon our evaluation of the facts, circumstances, and information available at the reporting date. The economic benefit associated with a tax position will be recognized only if we determine it is more likely than not to be upheld on audit. Although we believe our estimates and judgments are reasonable, actual results could differ, resulting in gains or losses that may be material to our results of operations and financial position.

At each interim reporting period, we estimate an effective income tax rate that is expected to be applicable for the full year. Our provision for income taxes is impacted by the income tax rates of the countries where we operate. A change in the geographical source of our income can affect the effective tax rate. Significant judgment is involved regarding the application of global income tax laws and regulations when projecting the jurisdictional mix of income. Additionally, interpretations of tax laws, court decisions, or other guidance provided by taxing authorities influence our estimate of the effective income tax rate. As a result, our actual effective income tax rate and related income tax liabilities may differ materially from our estimated effective tax rate and related income tax liabilities.

Intangibles (net of amortization) and Goodwill

We have certain identifiable intangibles amounting to \$1 million and goodwill amounting to \$124 million at December 31, 2023 that are discussed in Note 10. These intangibles and goodwill relate to our petroleum additives business. The intangibles are being amortized over periods with up to approximately 5 years of remaining life. We continue to assess the market related to the intangibles and goodwill, as well as their specific values and evaluate the intangibles and goodwill for any potential impairment when significant events or circumstances occur that might impair the value of these assets. We have concluded the values are appropriate, as are the amortization periods for the intangibles. However, if conditions were to substantially deteriorate in the petroleum additives market, it could possibly cause a decrease in the estimated useful lives of the intangible assets or result in a noncash write-off of all or a portion of the intangibles and goodwill carrying amounts. A reduction in the amortization period of the intangibles would have no effect on cash flows. We do not anticipate such a change in the market conditions in the near term.

Pension Plans and Other Postretirement Benefits

We use assumptions to record the impact of the pension and postretirement benefit plans in the financial statements. These assumptions include the discount rate and the expected long-term rate of return on plan assets. A change in any of these assumptions could cause different results for the plans and therefore, impact our results of operations, cash flows, and financial condition. We develop these assumptions after considering available information that we deem relevant. Information is provided on the pension and postretirement plans in Note 17. In addition, further disclosure of the effect of changes in these assumptions is provided in the Financial Position and Liquidity section of Item 7.

Environmental and Legal Proceedings

We have disclosed our environmental matters in Item 1 of this Annual Report on Form 10-K, as well as in Note 20. Our estimates for costs that will be incurred to satisfy our obligations related to environmental matters are affected by many variables, including our judgment regarding the extent of remediation that will be required, future changes in and enforcement and interpretation of laws and regulations, current and future technology available, and timing of remediation activities. While we currently do not anticipate significant changes to the many factors that could impact our environmental requirements, we continue to keep our accruals consistent with these requirements as they change.

Also, as noted in the discussion of Legal Proceedings in Item 3 of this Annual Report on Form 10-K, while it is not possible to predict or determine with certainty the outcome of any legal proceeding, it is our opinion, based on our current knowledge, that we will not experience any material adverse effects on our results of operations, cash flows, or financial condition as a result of any pending or threatened proceeding.

RECENTLY ISSUED ACCOUNTING STANDARDS

For a full discussion of the more significant recently issued accounting standards, see Note 22.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to many market risk factors, including changes in the cost of raw materials, as well as interest and foreign currency rates. These risk factors may affect our results of operations, cash flows, and financial position.

We manage these risks through regular operating and financing methods, including the use of derivative financial instruments when deemed appropriate. When we have derivative instruments, they are with major financial institutions and are not for speculative or trading purposes.

The following analysis presents the effect on our results of operations, cash flows, and financial position as if the hypothetical changes in market risk factors occurred at December 31, 2023. We analyzed only the potential impacts of our hypothetical assumptions. This analysis does not consider other possible effects that could impact our business.

Interest Rate Risk

At December 31, 2023, we had total long-term debt of \$644 million. All of our long-term debt is at fixed rates except for debt outstanding under the revolving credit facility. There was no interest rate risk at the end of the year associated with the fixed rate debt.

At December 31, 2023, we had no outstanding variable rate debt under our revolving credit facility. As such, we had no interest rate risk on variable rate debt at December 31, 2023.

A hypothetical 100 basis point decrease in interest rates, holding all other variables constant, would have resulted in a change of \$35 million in fair value of our debt at December 31, 2023.

Foreign Currency Risk

We sell to customers in foreign markets through our foreign subsidiaries, as well as through export sales from the United States. These transactions are often denominated in currencies other than the U.S. Dollar. Our primary currency exposures are the European Union Euro, British Pound Sterling, Japanese Yen, Chinese Renminbi, Indian Rupee, Singapore Dollar, Mexican Peso, Australian Dollar, and Canadian Dollar. We may enter into forward contracts as hedges to minimize the fluctuation of intercompany accounts receivable denominated in foreign currencies. At December 31, 2023, we had no outstanding forward contracts.

Raw Material Price Risk

We utilize a variety of raw materials in the manufacture of our products, including base oil, polyisobutylene, antioxidants, alcohols, solvents, detergents, friction modifiers, olefins, and copolymers. We may also enter into contracts which commit us to purchase some of our more critical raw materials based on anticipated demand. Our profitability is sensitive to changes in the quantities of raw materials we may need and the costs of those materials which may be caused by changes in supply, demand or other market conditions, over which we have little or no control. In addition, political and economic conditions in certain regions of the world in which we operate have caused, and may continue to cause, our demand for and the cost of our raw materials to fluctuate. War, armed hostilities, terrorist acts, civil unrest, inclement weather events, or other incidents may also cause a sudden, sharp, or prolonged change in our demand for and the cost of our raw materials. If we experience such increases in the cost of our raw materials, we may not be able to pass them along to our customers in the form of price increases for our products. The inability to do so would have a negative impact on our operating profit. In addition, if our demand for raw materials were to decline such that we would not have need for the quantities required to be purchased under commitment agreements, we could incur additional charges that would affect our profitability.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of NewMarket Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of NewMarket Corporation and its subsidiaries (the "Company") as of December 31, 2023 and 2022, and the related consolidated statements of income, of comprehensive income, of shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2023, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting

includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of Pension Benefit Obligation

As described in Note 17 to the consolidated financial statements, the Company's consolidated pension benefit obligation, excluding other postretirement benefits, was \$502 million as of December 31, 2023. Management develops the actuarial assumptions used by the various US and foreign plans based upon the circumstances of each particular country and pension plan. As disclosed by management, the determination of the pension benefit obligation requires the use of estimates and assumptions. One of management's assumptions in the determination of the pension benefit obligation is the discount rate.

The principal considerations for our determination that performing procedures relating to the valuation of the pension benefit obligation is a critical audit matter are (i) the significant judgment by management to determine the pension benefit obligation; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures to evaluate management's significant assumption used in the valuation of the pension benefit obligation, specifically the discount rate; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the valuation of the pension benefit obligation, including controls over the Company's methods, significant assumption, and data. These procedures also included, among others, testing the completeness, accuracy, and relevance of underlying data used in the valuation of the pension benefit obligation. With the involvement of professionals with specialized skill and knowledge to assist, these procedures also included testing management's process for determining the pension benefit obligation, evaluating the appropriateness of the methods, and evaluating the reasonableness of the significant assumption, specifically the discount rate.

/s/ PricewaterhouseCoopers LLP

Richmond, Virginia

February 15, 2024

We have served as the Company's or its predecessor's auditor since 1947.

Consolidated Statements of Income

	Years Ended December 31,		
(in thousands, except per-share amounts)	2023	2022	2021
Net sales	\$2,698,419	\$2,764,799	\$2,356,110
Cost of goods sold	1,925,906	2,124,302	1,808,403
Gross profit	772,513	640,497	547,707
Selling, general, and administrative expenses	151,470	145,106	145,973
Research, development, and testing expenses	137,998	140,252	143,952
Operating profit	483,045	355,139	257,782
Interest and financing expenses, net	37,359	35,202	34,218
Loss on early extinguishment of debt	0	7,545	0
Other income (expense), net	43,276	35,342	23,987
Income before income tax expense	488,962	347,734	247,551
Income tax expense	100,098	68,196	56,643
Net income	\$ 388,864	\$ 279,538	\$ 190,908
Earnings per share - basic and diluted	\$ 40.44	\$ 27.77	\$ 17.71

Consolidated Statements of Comprehensive Income

	Years Ended December 31,		
(in thousands)	2023	2022	2021
Net income	\$388,864	\$279,538	\$190,908
Other comprehensive income (loss):			
Pension plans and other postretirement benefits:			
Prior service credit (cost) arising during the period, net of income tax expense (benefit) of \$(212) in 2023, \$(21) in 2022 and \$8 in			
2021	(436)	(65)	27
Amortization of prior service cost (credit) included in net periodic benefit cost (income), net of income tax expense (benefit) of			
\$(642) in 2023, \$(627) in 2022 and \$(628) in 2021	(2,062)	(1,993)	(1,977)
Actuarial net gain (loss) arising during the period, net of income tax expense (benefit) of \$9,879 in 2023, \$17,552 in 2022 and			
\$29,035 in 2021	29,343	53,084	89,167
\$(456) in 2023, \$655 in 2022 and \$2,263 in 2021	(1,441)	2,014	7,076
Total pension plans and other postretirement benefits	25,404	53,040	94,293
Foreign currency translation adjustments, net of income tax expense			
(benefit) of \$703 in 2023, \$468 in 2022 and \$(380) in 2021	25,520	(42,808)	(3,356)
Other comprehensive income (loss)	50,924	10,232	90,937
Comprehensive income	\$439,788	\$289,770	\$281,845

Consolidated Balance Sheets

	Decem	ber 31,
(in thousands, except share amounts)	2023	2022
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 111,936	\$ 68,712
Trade and other accounts receivable, net	432,349	453,692
Inventories	456,234	631,383
Prepaid expenses and other current assets	39,051	38,338
Total current assets	1,039,570	1,192,125
Property, plant, and equipment, net	654,747	659,998
Intangibles (net of amortization) and goodwill	124,642	126,069
Prepaid pension cost	370,882	302,584
Operating lease right-of-use assets	70,823	62,417
Deferred charges and other assets	48,207	63,625
Total assets	\$2,308,871	\$2,406,818
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 231,137	\$ 273,289
Accrued expenses	76,546	89,508
Dividends payable	19,212	17,850
Income taxes payable	6,131	16,109
Operating lease liabilities	15,074	15,569
Other current liabilities	16,064	11,562
Total current liabilities	364,164	423,887
Long-term debt	643,622	1,003,737
Operating lease liabilities - noncurrent	55,058	46,968
Other noncurrent liabilities	168,966	169,819
Total liabilities	1,231,810	1,644,411
Commitments and contingencies (Note 20)		
Shareholders' equity:		
Common stock and paid-in capital (with no par value; authorized shares -		
80,000,000; issued and outstanding - 9,590,086 at December 31, 2023 and		
9,702,147 at December 31, 2022)	2,130	0
Accumulated other comprehensive loss	(21,071)	(71,995)
Retained earnings	1,096,002	834,402
Total shareholders' equity	1,077,061	762,407
Total liabilities and shareholders' equity	\$2,308,871	\$2,406,818

Consolidated Statements of Shareholders' Equity

	Common St Paid-in C		Accumulated Other Comprehensive	Retained	Total Shareholders'
(in thousands, except share and per-share amounts)	Shares	Amount	Loss	Earnings	Equity
Balance at December 31, 2020	10,921,377	\$ 717	\$(173,164)	\$ 932,271	\$ 759,824
Net income				190,908	190,908
Other comprehensive income (loss)			90,937		90,937
Cash dividends (\$8.00 per share)				(85,910)	(85,910)
Repurchases of common stock	(566,671)	(3,305)		(192,915)	(196,220)
Stock-based compensation	8,016	2,588		2	2,590
Balance at December 31, 2021	10,362,722	0	(82,227)	844,356	762,129
Net income				279,538	279,538
Other comprehensive income (loss)			10,232		10,232
Cash dividends (\$8.40 per share)				(84,263)	(84,263)
Repurchases of common stock	(668,553)	(2,205)		(205,265)	(207,470)
Stock-based compensation	7,978	2,205		36	2,241
Balance at December 31, 2022	9,702,147	0	(71,995)	834,402	762,407
Net income				388,864	388,864
Other comprehensive income (loss)			50,924		50,924
Cash dividends (\$8.85 per share)				(85,034)	(85,034)
Repurchases of common stock	(119,075)	(1,857)		(41,419)	(43,276)
Tax withholdings related to stock-based					
compensation	(2,493)	(33)		(803)	(836)
Stock-based compensation	9,507	4,020		(8)	4,012
Balance at December 31, 2023	9,590,086	\$ 2,130	<u>\$ (21,071)</u>	\$1,096,002	\$1,077,061

Consolidated Statements of Cash Flows

	Years Ended December			er 31,	
(in thousands)		2023		2022	2021
Cash and cash equivalents at beginning of year	\$	68,712	\$	83,304	\$ 125,172
Cash flows from operating activities:				_	
Net income	,	388,864		279,538	190,908
Adjustments to reconcile net income to cash flows from operating activities:					
Depreciation and amortization		78,010		82,285	84,320
Deferred income tax (benefit) expense		(14,750)		(42,645)	1,978
Loss on early extinguishment of debt		0		7,545	0
Change in assets and liabilities:					
Trade and other accounts receivable, net		31,594		(73,089)	(53,990)
Inventories		192,470	(166,558)	(96,199)
Prepaid expenses and other current assets		744		2,159	(2,691)
Accounts payable and accrued expenses		(59,176)		35,532	60,407
Operating lease liabilities		(20,005)		(18,275)	(18,204)
Other current liabilities		(1,855)		4,009	(6,240)
Income taxes payable		(9,492)		11,586	562
Loss on marketable securities		(10.210)		2,977	7,440
Cash pension and postretirement contributions		(10,219)		(9,748)	(10,342)
Other, net		638	_	(6,696)	7,387
Cash provided from (used in) operating activities	;	576,823		108,620	165,336
Cash flows from investing activities:					
Capital expenditures		(48,293)		(56,169)	(78,934)
Purchases of marketable securities		0		(787)	(393,434)
Proceeds from sales and maturities of marketable securities		0		372,846	10,957
Cash provided from (used in) investing activities		(48,293)		315,890	(461,411)
Cash flows from financing activities:					
Net (repayments) borrowings under revolving credit facility	(.	361,000)		213,000	148,000
Dividends paid		(85,034)		(84,263)	(85,910)
Repurchases of common stock		(42,864)	(207,470)	(196,220)
Redemption of 4.10% senior notes		0	(350,000)	0
Cash costs of 4.10% senior notes redemption		0		(7,099)	0
Issuance of 2.70% senior notes		0		0	395,052
Debt issuance costs		0		0	(3,897)
Other, net	_	1,304	_	(3,525)	(1,892)
Cash provided from (used in) financing activities	_(-	487,594)	_(-	439,357)	255,133
Effect of foreign exchange on cash and cash equivalents		2,288		255	(926)
Increase (decrease) in cash and cash equivalents		43,224		(14,592)	(41,868)
Cash and cash equivalents at end of year	\$	111,936	\$	68,712	\$ 83,304

1. Summary of Significant Accounting Policies

Consolidation - Our consolidated financial statements include the accounts of NewMarket Corporation and its subsidiaries. All intercompany transactions are eliminated upon consolidation. References to "we," "us," "our," the "company," and "NewMarket" are to NewMarket Corporation and its consolidated subsidiaries, unless the context indicates otherwise.

NewMarket is the parent company of separate operating companies, each managing its own assets and liabilities. Those companies are Afton, which focuses on petroleum additive products; Ethyl, representing certain contracted manufacturing and related services, as well as the antiknock compounds business; and NewMarket Development, which manages the real property and improvements that we own in Virginia. NewMarket is also the parent company of NewMarket Services, which provides various administrative services to NewMarket, Afton, Ethyl, and NewMarket Development.

Foreign Currency Translation - We translate the balance sheets of our foreign subsidiaries into U.S. Dollars based on the current exchange rate at the end of each period. We translate the statements of income using the weighted-average exchange rates for the period. NewMarket includes translation adjustments in the Consolidated Balance Sheets as part of accumulated other comprehensive loss and transaction adjustments in the Consolidated Statements of Income as part of cost of goods sold. Foreign currency transaction adjustments resulted in a net loss of \$4 million in both 2023 and 2022 and \$6 million in 2021.

Revenue Recognition - We recognize revenue when control of the product is transferred to our customer and for an amount that reflects the consideration we expect to collect from the customer. Net sales (revenues) are reported at the gross amount billed, including amounts related to shipping that are charged to the customer. Provisions for rebates to customers are recorded in the same period that the related sales are recorded. Freight costs incurred on the delivery of products are included in the Consolidated Statements of Income in cost of goods sold. Our standard terms of delivery are included in our contracts, sales order confirmation documents, and invoices. Taxes assessed by a governmental authority concurrent with sales to our customers, including sales, use, value-added, and revenue-related excise taxes, are not included as net sales, but are reflected in accrued expenses until remitted to the appropriate governmental authority.

Cash and Cash Equivalents - Our cash equivalents consist of government obligations and commercial paper with original maturities of less than 90 days. Throughout the year, we have cash balances in excess of federally insured amounts on deposit with various financial institutions. We state cash and cash equivalents at cost, which approximates fair value.

Marketable Securities - Our trading and equity securities are recorded at estimated fair value. Unrealized gains and losses on trading and equity securities are included in net income.

Accounts Receivable - We record our accounts receivable at invoiced amounts adjusted for allowances for credit losses. The allowance for credit losses represents probable losses to be incurred if our customers do not make required payments. We determine the adequacy of the allowance by periodically evaluating each customer's receivable balance, considering their financial condition and credit history, and considering current economic conditions. The allowance for credit losses was not material at December 31, 2023 or December 31, 2022.

Inventories - NewMarket values its inventories at the lower of cost or net realizable value. In the United States, petroleum additives inventory cost is determined on the last-in, first-out (LIFO) basis. For all other inventory, we determine cost using a weighted-average method. Inventory cost includes raw materials, direct labor, and manufacturing overhead.

Property, Plant, and Equipment - We state property, plant, and equipment at cost less accumulated depreciation and compute depreciation by the straight-line method based on the estimated useful lives of the assets. We capitalize expenditures for significant improvements that extend the useful life of the related property.

We expense repairs and maintenance, including plant turnaround costs, as incurred. When property is sold or retired, we remove the cost and accumulated depreciation from the accounts and any related gain or loss is included in earnings.

Intangibles (Net of Amortization) and Goodwill - Identifiable intangibles include acquired contracts, formulas and technology, trademarks and trade names, and customer bases. We assign a value to acquired identifiable intangibles based on independent third-party appraisals and management's assessment at the time of acquisition. NewMarket amortizes the cost of the customer bases by an accelerated method and the cost of the remaining identifiable intangibles by the straight-line method over the estimated economic life of the intangible.

Goodwill arises from the excess of cost over the net assets of businesses acquired. Goodwill represents the residual purchase price after allocation to all identifiable net assets. We test goodwill for impairment each year, as well as whenever a significant event or circumstance occurs which could reduce the fair value of the reporting unit to which the goodwill applies below the carrying amount of the reporting unit.

Impairment of Long-Lived Assets - When significant events or circumstances occur that might impair the value of long-lived assets, we evaluate recoverability of the recorded cost of these assets. Assets are considered to be impaired if their carrying amount is not recoverable from the estimated undiscounted future cash flows associated with the assets. If we determine an asset is impaired and its recorded cost is higher than estimated fair value based on the estimated present value of future cash flows, we adjust the asset to the estimated fair value.

Environmental Costs - NewMarket capitalizes environmental compliance costs if they extend the useful life of the related property or prevent future contamination. Environmental compliance costs also include maintenance and operation of pollution prevention and control facilities. We expense these compliance costs in cost of goods sold as incurred.

Accrued environmental remediation and monitoring costs relate to an existing condition caused by past operations. NewMarket accrues these costs in current operations within cost of goods sold in the Consolidated Statements of Income when it is probable that we have incurred a liability and the amount can be reasonably estimated. These estimates are based on an assessment of the site, available clean-up methods, and prior experience in handling remediation.

When we can reliably determine the amount and timing of future cash flows, we discount these liabilities, incorporating an inflation factor.

Legal Costs - We expense legal costs in the period incurred.

Employee Savings Plan - Most of our full-time salaried and hourly employees may participate in defined contribution savings plans. Employees who are covered by collective bargaining agreements may also participate in a savings plan according to the terms of their bargaining agreements. Employees, as well as NewMarket, contribute to the plans. We made contributions of \$7 million in each of 2023, 2022, and 2021 related to these plans.

Research, Development, and Testing Expenses - NewMarket expenses all research, development, and testing costs as incurred. R&D costs include personnel-related costs, as well as internal and external testing of our products.

Income Taxes - We recognize deferred income taxes for temporary differences between the financial reporting basis and the income tax basis of assets and liabilities. We also adjust for changes in tax rates and laws at the time the changes are enacted. A valuation allowance is recorded when it is more likely than not that a deferred tax asset will not be realized. We typically remove a tax impact from accumulated other comprehensive loss when the underlying circumstance which gave rise to the tax impact no longer exists.

The calculation of income tax liabilities involves uncertainties in the application of complex tax laws and regulations, which are subject to legal interpretation and management judgment. Our income tax returns are regularly examined by federal, state and foreign tax authorities, and those audits may result in proposed

adjustments. We have evaluated our tax positions under the more likely than not standard of the accounting literature, and a tax position is recognized if it meets this standard. Such judgments and estimates may change based on audit settlements, court cases, and interpretation of tax laws and regulations. We recognize accrued interest and penalties associated with uncertain tax positions as part of income tax expense on our Consolidated Statements of Income.

Leases - We determine if an arrangement includes a lease at the inception of the agreement. The right-of-use asset and lease liability are determined at the lease commencement date and are based on the present value of estimated lease payments.

Our lease agreements contain both fixed and variable lease payments. In some cases, variable lease payments are based on a rate or an index. Fixed lease payments, as well as variable lease payments which are based on a rate or index, are included in the determination of the right-of-use asset and lease liability at lease inception. Variable lease payments that are not based on a rate or index are expensed when incurred.

The present value of estimated lease payments is determined utilizing the rate implicit in the lease agreement if that rate can be determined. If the implicit rate cannot be determined, the present value of estimated lease payments is determined utilizing our incremental borrowing rate. The incremental borrowing rate is determined at the lease commencement date and is developed utilizing a readily available market interest rate curve adjusted for our credit quality.

Some of our leases include an option to renew that can extend the lease term. For those leases which are reasonably certain to be renewed, we include the renewal in the lease term.

We do not recognize leases with terms of 12 months or less on the balance sheet for any lease class, except the railcar lease class. For the short-term leases not recorded on the balance sheet, the lease payments are recognized in the Consolidated Statements of Income on a straight-line basis over the lease term.

We account for the lease and nonlease components as a single lease component in determining the right-of-use assets and lease liabilities for all lease classes.

Derivative Financial Instruments and Hedging Activities - We are exposed to certain risks arising from both our business operations and economic conditions. We manage our exposures to a wide variety of business and operational risks through management of our core business activities.

We manage certain economic risks, including interest rate, liquidity, and credit risk primarily by managing the amount, sources, and duration of our debt funding, as well as through the use of derivative financial instruments. We sometimes enter into interest rate swaps to manage our exposure to interest rate movements.

In addition, our foreign operations expose us to fluctuations of foreign exchange rates. These fluctuations may impact our results of operations, financial position, and cash flows. To manage this exposure, we sometimes enter into foreign currency forward contracts to minimize currency exposure due to cash flows from foreign operations.

We record all derivatives on the balance sheet at fair value. The accounting for changes in the fair value of derivatives depends on the intended use of the derivative, whether we have elected to designate a derivative in a hedging relationship and apply hedge accounting, and whether the hedging relationship has satisfied the criteria necessary to apply hedge accounting. We may enter into derivative contracts that are intended to economically hedge certain of our risks, even though hedge accounting does not apply, or we elect not to apply hedge accounting. We do not enter into derivative instruments for speculative purposes. We had no derivative financial instruments outstanding at December 31, 2023 or December 31, 2022.

Stock-based Compensation - We calculate the fair value of restricted stock and restricted stock units based on the closing price of our common stock on the date of grant. If award recipients are entitled to receive dividends during the vesting period, we make no adjustment to the fair value of the award for dividends. If the award does not entitle recipients to dividends during the vesting period, we reduce the grant-date price of our common stock by the present value of the dividends expected to be paid on the underlying shares during the vesting period, discounted at the risk-free interest rate.

We recognize stock-based compensation expense for the number of awards expected to vest on a straight-line basis over the requisite service period.

Supplier Finance Programs - We offer our vendors a supplier finance program, which allows our vendors to receive payment from a third-party finance provider earlier than our normal payment terms would provide. NewMarket and its subsidiaries are not a party to the arrangement between our vendor and the finance provider, and there are no assets pledged as security or other forms of guarantees provided by NewMarket to the finance provider. For those vendors who opt to participate in the program, we pay the finance provider the full amount of the invoices on the normal due date. At December 31, 2023, the amount of confirmed invoices under the supplier finance program was not material.

Estimates and Risks Due to Concentration of Business - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

In addition, our financial results can be influenced by certain risk factors. Some of our significant concentrations of risk include the following:

- reliance on a small number of significant customers;
- customers concentrated in the fuel and lubricant industries; and
- production of several of our products solely at one facility.

2. Net Sales

Our revenues are primarily derived from the manufacture and sale of petroleum additives products. We sell petroleum additives products across the world including to customers located in our North America, Latin America, Asia Pacific, and EMEAI regions. Our customers primarily consist of global, national, and independent oil companies. While some of our customers have payment terms beyond 30 days, we do not provide extended payment terms of a year or more, nor do our contracts include a financing component. Our allowance for credit losses is immaterial, as are any bad debts we have incurred. In limited cases, we collect funds in advance of shipping product to our customers and recognizing the related revenue. These prepayments from customers are recorded as a contract liability until we recognize the revenue. Prepayments from our customers totaled \$0.3 million at December 31, 2023 and \$1 million at December 31, 2022. Revenue recognized from funds collected in advance from customers in an earlier period was \$1 million in both 2023 and 2022, and \$2 million in 2021.

We recognize revenue when control of the product is transferred to our customer and for an amount that reflects the consideration we expect to collect from the customer. Control is generally transferred to the customer when title transfers (which may include physical possession by the customer), we have a right to payment from the customer, the customer has accepted the product, and the customer has assumed the risks and rewards of ownership. We have supplier managed inventory arrangements with some of our customers to facilitate on-demand product availability. In some cases, the inventory resides at a customer site, although title has not transferred, we are not entitled to payment, and we have not invoiced for the product. We have evaluated the contract terms under these arrangements and have determined that control transfers when the customer uses the product, at which time revenue is recognized. Our contracts generally include one performance obligation, which is providing petroleum additives products. The performance obligation is satisfied at a point in time when products are shipped, delivered, or consumed by the customer, depending on the underlying contracts.

Taxes assessed by a governmental authority which are concurrent with sales to our customers, including sales, use, value-added, and revenue-related excise taxes, are collected by us from the customer and are not included in net sales, but are reflected in accrued expenses until remitted to the appropriate governmental authority. When we are responsible for shipping and handling costs after title has transferred, we account for those as fulfillment costs and include them in cost of goods sold.

Some of our contracts include variable consideration in the form of rebates or business development funds. We record rebates at the point of sale as contra-revenue when we can reasonably estimate the amount of the rebate. The estimates are based on our best judgment at the time of sale, which includes anticipated as well as historical performance. Depending upon the specific terms of a business development fund, amounts are accrued as contra-revenue at the point of sale or are expensed when costs are incurred by us. We regularly review both rebates and business development funds and make adjustments when necessary, recognizing the full amount of any adjustment in the period identified. We recognized an increase to net sales of \$5 million in 2023, \$2 million in 2022, and \$4 million in 2021 related to adjustments to rebates or business development funds which were recognized in revenue in a prior period. At December 31, 2023, accrued rebates were \$18 million and accrued business development funds were \$0.3 million. At December 31, 2022, accrued rebates were \$28 million and accrued business development funds were \$0.4 million.

The following table provides information on our net sales by geographic area. Information on net sales by segment is in Note 4.

	Years Ended December 31,			
(in thousands)	2023	2022	2021	
Net sales				
United States	\$ 972,954	\$ 974,963	\$ 780,278	
China	186,181	181,283	255,219	
Europe, Middle East, Africa, India	791,744	807,782	708,675	
Asia Pacific, except China	396,790	435,684	325,621	
Other foreign	350,750	365,087	286,317	
Net sales	\$2,698,419	\$2,764,799	\$2,356,110	

3. Earnings Per Share

We had 34,006 shares in 2023, 33,055 shares in 2022, and 26,572 shares in 2021 of nonvested restricted stock that were excluded from the calculation of diluted earnings per share, as their effect on earnings per share would be anti-dilutive.

The nonvested restricted stock is considered a participating security since the restricted stock contains nonforfeitable rights to dividends. As such, we use the two-class method to compute basic and diluted earnings per share for all periods presented since this method yields the most dilutive result. The following table illustrates the earnings allocation method utilized in the calculation of basic and diluted earnings per share.

Voors Ended December 21

	Years Ended December 31		
(in thousands, except per-share amounts)	2023	2022	2021
Earnings per share numerator:			
Net income attributable to common shareholders			
before allocation of earnings to participating			
securities	\$388,864	\$279,538	\$190,908
Earnings allocated to participating securities	(1,339)	(876)	(462)
Net income attributable to common shareholders			
after allocation of earnings to participating			
securities	\$387,525	\$278,662	\$190,446
Earnings per share denominator:			
Weighted-average number of shares of common			
stock outstanding - basic and diluted	9,583	10,035	10,756
Earnings per share - basic and diluted	\$ 40.44	\$ 27.77	\$ 17.71

4. Segment and Geographic Area Information

Segment Information - The tables below show our consolidated segment results. The "All other" category includes the operations of the antiknock compounds business, as well as certain contracted manufacturing and related services associated with Ethyl.

The segment accounting policies are the same as those described in Note 1. We evaluate the performance of the petroleum additives business based on segment operating profit. NewMarket Services expenses are billed to Afton and Ethyl based on the services provided under the holding company structure. Depreciation on segment property, plant, and equipment, as well as amortization of segment intangible assets and lease right-of-use assets are included in segment operating profit. No transfers occurred between the petroleum additives segment and the "All other" category during the periods presented. The table below reports net sales and operating profit by segment, as well as a reconciliation to income before income tax expense, for the last three years.

	Years Ended December 31,			
(in thousands)	2023	2022	2021	
Net sales				
Petroleum additives				
Lubricant additives	\$2,295,440	\$2,342,622	\$1,998,772	
Fuel additives	394,269	411,688	345,170	
Total	2,689,709	2,754,310	2,343,942	
All other	8,710	10,489	12,168	
Net sales (a)	\$2,698,419	\$2,764,799	\$2,356,110	
Segment operating profit				
Petroleum additives	\$ 514,428	\$ 378,244	\$ 281,055	
All other	(4,986)	(1,782)	(1,525)	
Segment operating profit	509,442	376,462	279,530	
Corporate, general, and administrative				
expenses	(26,147)	(21,579)	(21,214)	
Interest and financing expenses, net	(37,359)	(35,202)	(34,218)	
Loss on early extinguishment of debt	0	(7,545)	0	
Other income (expense), net	43,026	35,598	23,453	
Income before income tax expense	\$ 488,962	\$ 347,734	\$ 247,551	

(a) No single customer accounted for 10% or more of our total net sales in 2023, 2022, or 2021.

The following tables show asset information by segment and the reconciliation to consolidated assets. Segment assets consist of accounts receivable, inventory, and long-lived assets. Long-lived assets included in the petroleum additives segment amounts in the table below include property, plant, and equipment (net of

depreciation), intangibles (net of amortization) and goodwill, and lease right-of-use assets. The additions to long-lived assets include property, plant, and equipment and lease right-of-use assets.

	December 31,	
(in thousands)	2023	2022
Segment assets		
Petroleum additives	\$1,728,397	\$1,929,340
All other	10,098	18,738
	1,738,495	1,948,078
Cash and cash equivalents	111,936	68,712
Non-segment other accounts receivable	3,083	2,220
Prepaid expenses and other current assets	39,051	38,338
Non-segment property, plant, and equipment, net	31,983	32,191
Prepaid pension cost	370,882	302,584
Non-segment lease right-of-use assets	5	26
Non-segment deferred charges and other assets	13,436	14,669
Total assets	\$2,308,871	\$2,406,818

	Years Ended December 31,		
(in thousands)	2023	2022	2021
Additions to long-lived assets			
Petroleum additives	\$ 72,038	\$64,456	\$134,873
All other	1	147	22
Corporate	2,018	3,983	686
Total additions to long-lived assets	\$ 74,057	\$68,586	\$135,581
Depreciation and amortization			
Petroleum additives	\$ 74,471	\$78,744	\$ 80,495
All other	45	51	51
Corporate	3,494	3,490	3,774
Total depreciation and amortization	\$ 78,010	\$82,285	\$ 84,320

Geographic Area Information - We have operations in the North America, Latin America, Asia Pacific, and EMEAI regions. Our foreign customers consist primarily of global, national, and independent oil companies.

The tables below report net sales, total assets, and long-lived assets by geographic area, as well as by country for those countries with significant net sales or long-lived assets. Since our foreign operations are significant to our overall business, we are also presenting net sales in the table below by the major regions in which we operate. NewMarket assigns net sales to geographic areas based on the location to which the product was shipped to a third party. Long-lived assets in the table below include property, plant, and equipment, net of depreciation, and lease right-of-use assets.

	Years Ended December 31,			
(in thousands)	2023	2022	2021	
Net sales				
United States	\$ 972,954	\$ 974,963	\$ 780,278	
China	186,181	181,283	255,219	
Europe, Middle East, Africa, India	791,744	807,782	708,675	
Asia Pacific, except China	396,790	435,684	325,621	
Other foreign	350,750	365,087	286,317	
Net sales	\$2,698,419	\$2,764,799	\$2,356,110	
		Decem	ber 31,	
(in thousands)		2023	2022	
<u>` </u>		2023	2022	
Total assets				
		\$1,016,449	\$ 990,037	
Total assets				
Total assets United States		\$1,016,449	\$ 990,037	
Total assets United States Foreign		\$1,016,449 1,292,422	\$ 990,037 1,416,781	
Total assets United States Foreign Total assets		\$1,016,449 1,292,422	\$ 990,037 1,416,781	
Total assets United States Foreign Total assets Long-lived assets		\$1,016,449 1,292,422 \$2,308,871	\$ 990,037 1,416,781 \$2,406,818	

5. Supplemental Cash Flow Information

	Years Ended December 3		
(in thousands)	2023	2022	2021
Cash paid during the year for			
Interest and financing expenses (net of capitalization)	\$ 36,644	\$40,531	\$30,465
Income taxes	132,928	88,866	67,917
Supplemental disclosure of non-cash transactions			
Non-cash additions to property, plant, and equipment	\$ 1,788	\$ 4,087	\$ 4,872

\$ 760,341

759,308

6. Trade and Other Accounts Receivable, Net

(in thousands)		December 31,	
		2022	
Trade receivables	\$368,240	\$384,636	
Income and other tax receivables	59,190	60,745	
Other	4,919	8,311	
	\$432,349	\$453,692	

7. Inventories

	December 31,	
(in thousands)	2023	2022
Finished goods and work-in-process	\$351,746	\$497,652
Raw materials	82,441	113,484
Stores, supplies, and other	22,047	20,247
	\$456,234	\$631,383

Our U.S. petroleum additives finished goods, work-in-process, and raw materials inventories, which are stated on the LIFO basis, amounted to \$123 million at December 31, 2023 and were below replacement cost by approximately \$94 million. At December 31, 2022, LIFO basis inventories were \$165 million, which was approximately \$114 million below replacement cost.

Our foreign inventories amounted to \$313 million at December 31, 2023 and \$451 million at December 31, 2022.

Reserves for obsolete and slow-moving inventory included in the table above were not material at December 31, 2023 or December 31, 2022.

8. Prepaid Expenses and Other Current Assets

	December 31,	
(in thousands)	2023	2022
Dividend funding	\$19,212	\$17,850
Income taxes on intercompany profit	7,054	6,925
Other	12,785	13,563
	\$39,051	\$38,338

9. Property, Plant, and Equipment, at Cost

	December 31,	
(in thousands)	2023	2022
Land	\$ 37,225	\$ 37,088
Land improvements	65,064	64,061
Leasehold improvements	1,842	1,832
Buildings	185,537	183,030
Machinery and equipment	1,328,808	1,279,425
Construction in progress	27,563	30,916
	1,646,039	1,596,352
Less: accumulated depreciation and amortization	991,292	936,354
Net property, plant, and equipment	\$ 654,747	\$ 659,998

We depreciate the cost of property, plant, and equipment by the straight-line method over the following estimated useful lives:

Land improvements	3 - 40 years
Buildings	5 - 46 years
Machinery and equipment	1 - 30 years

Depreciation expense was \$56 million in 2023, \$60 million in 2022, and \$61 million in 2021.

10. Intangibles (Net of Amortization) and Goodwill

The net carrying amount of intangibles and goodwill was \$125 million at December 31, 2023 and \$126 million at December 31, 2022. The gross carrying amount and accumulated amortization of each type of intangible asset and goodwill are presented in the table below.

D. 21

Decem			ber 31,	
	2023		2022	
(in thousands)	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Amortizing intangible assets				
Formulas and technology	\$ 6,200	\$ 6,200	\$ 6,200	\$ 5,683
Contract	2,000	2,000	2,000	1,200
Customer base	5,440	4,539	5,440	4,350
Goodwill	123,741		123,662	
	\$137,381	\$12,739	\$137,302	\$11,233
Aggregate amortization expense		\$ 1,506		\$ 1,423

Aggregate amortization expense was \$2 million in 2021. All of the intangibles and goodwill relate to the petroleum additives segment. The change in the gross carrying amount between 2022 and 2023 was due to foreign currency fluctuations. There is no accumulated goodwill impairment.

Estimated annual amortization expense related to our intangible assets for the next five years is expected to be (in thousands):

2024	\$190
2025	190
2026	190
2027	190
2028	141

We amortize the customer base over 20 years.

11. Deferred Charges and Other Assets

		December 31,	
(in thousands)	2023	2022	
Finance lease right-of-use assets	\$34,771	\$36,893	
Deferred income tax assets	2,726	3,575	
Asbestos insurance receivables	2,883	2,994	
Deferred financing costs, net of amortization	611	1,095	
Deposit on future leased plant and equipment	0	12,063	
Other	7,216	7,005	
	\$48,207	\$63,625	

Deferred financing costs, net of amortization, in the table above include only those costs associated with the revolving credit facility. The amount of deferred financing costs, net of amortization, related to the 2.70% senior notes is reported as a component of long-term debt. See Note 13 for further information on our long-term debt.

12. Accrued Expenses

December 31,	
2023	2022
\$35,800	\$36,878
18,132	27,752
8,026	8,710
4,907	3,715
9,681	12,453
\$76,546	\$89,508
	\$35,800 18,132 8,026 4,907 9,681

13. Long-term Debt

	December 31,	
(in thousands)	2023	2022
Senior notes - 2.70% due 2031 (net of related deferred financing costs)	\$393,622	\$ 392,737
Senior notes - 3.78% due 2029	250,000	250,000
Revolving credit facility	0	361,000
	\$643,622	\$1,003,737

2.70% Senior Notes - On March 18, 2021, we issued \$400 million aggregate principal amount of 2.70% senior notes due 2031 at an issue price of 98.763%. The 2.70% senior notes are general unsecured senior obligations and rank equally with our other unsecured senior indebtedness. The offer and sale of the notes were registered under the Securities Act of 1933, as amended. We incurred financing costs in 2021 of approximately \$4 million related to the 2.70% senior notes, which are being amortized over the term of the notes.

The indenture governing the 2.70% senior notes includes certain customary covenants that, among other things and subject to certain qualifications and exceptions, limit our ability and the ability of our subsidiaries to:

- grant liens to secure indebtedness;
- engage in sale and lease back transactions;
- merge or consolidate with, or convey, transfer or lease all or substantially all of our assets to a third party.

We were in compliance with all covenants under the indenture governing the 2.70% senior notes as of December 31, 2023 and December 31, 2022.

3.78% Senior Notes - On January 4, 2017, we issued \$250 million in senior unsecured notes in a private placement with The Prudential Insurance Company of America and certain other purchasers. These notes bear interest at 3.78% and mature on January 4, 2029. Interest is payable semiannually. Principal payments of \$50 million are payable annually beginning on January 4, 2025. We have the right to make optional prepayments on the notes at any time, subject to certain limitations. The note purchase agreement contains representations, warranties, terms, and conditions customary for transactions of this type. These include negative covenants, certain financial covenants, and events of default which are substantially similar to the covenants and events of default in our revolving credit facility.

We were in compliance with all covenants under the 3.78% senior notes as of December 31, 2023 and December 31, 2022.

Revolving Credit Facility - On March 5, 2020, NewMarket and certain foreign subsidiary borrowers entered into a Credit Agreement (the Credit Agreement) with a term of five years. The Credit Agreement provided for a \$900 million, multicurrency revolving credit facility with a \$500 million sublimit for foreign currency borrowings, a \$50 million sublimit for letters of credit, and a \$20 million sublimit for swingline loans. The Credit Agreement included an expansion feature which allowed us, subject to certain conditions, to request an increase in the aggregate amount of the revolving credit facility or obtain incremental term loans in an amount up to \$425 million. NewMarket's obligations under the Credit Agreement were unsecured and the obligations of foreign subsidiary borrowers were fully and unconditionally guaranteed by NewMarket. The revolving credit facility was scheduled to mature on March 5, 2025.

Borrowings made under the revolving credit facility bore interest at a variable rate determined, at our option, at an annual rate equal to (i) the Alternate Base Rate (ABR), (ii) the Adjusted Term SOFR Rate (SOFR), or (iii) the Adjusted EURIBO Rate (EURIBO), each plus the Applicable Rate and all as defined in the Credit Agreement. The Applicable Rate was based, at our option, on our Leverage Ratio (as defined in the Credit Agreement) or credit rating. Prior to January 11, 2023, when we amended our revolving credit facility, LIBOR was utilized instead of SOFR as an option to establish interest rates on the revolving credit facility.

We paid financing costs in 2020 of approximately \$1.3 million related to this revolving credit facility and carried over deferred financing costs from our previous revolving credit facility of approximately \$1.2 million, resulting in total deferred financing costs of \$2.5 million, which we were amortizing over the term of the Credit Agreement.

There were no outstanding borrowings under the revolving credit facility at December 31, 2023 compared to \$361 million outstanding borrowings at December 31, 2022. Outstanding letters of credit amounted to \$2 million at both December 31, 2023 and December 31, 2022, resulting in the unused portion of the credit facility amounting to \$898 million at December 31, 2023 and \$537 million at December 31, 2022.

The average interest rate for borrowings under the credit facility was 6.2% during 2023 and 3.5% during 2022.

The Credit Agreement contained certain customary covenants, including financial covenants that required NewMarket to maintain a consolidated Leverage Ratio (as defined in the Credit Agreement) of no more than 3.75 to 1.00 except during an Increased Leverage Period (as defined in the Credit Agreement). We were in compliance with all covenants under the revolving credit facility in effect at December 31, 2023 and at December 31, 2022.

Credit Agreements Entered into in 2024 - On January 22, 2024, we entered into a new five-year, \$900 million revolving credit facility that replaced the facility discussed above and also entered into a new two-year, \$250 million unsecured term loan. This term loan gave us additional flexibility to repay borrowings under our revolving credit facility and support our business needs. See Note 23 for additional information.

14. Other Noncurrent Liabilities

	December 31,	
(in thousands)	2023	2022
Deferred income tax liabilities	\$ 58,657	\$ 61,993
Employee benefits	61,656	58,974
Finance lease liabilities	19,844	22,433
Environmental remediation	9,601	9,454
Asbestos litigation reserve	5,193	5,354
Deemed repatriation of earnings	2,956	2,956
Other	11,059	8,655
	\$168,966	\$169,819

15. Stock-based Compensation

The 2023 Incentive Compensation and Stock Plan (the Plan) was approved on April 27, 2023 and replaced the 2014 Incentive Compensation and Stock Plan (the Prior Plan). No new awards may be granted under the Prior Plan, but the terms of the Prior Plan continue to govern awards that were issued under the Prior Plan and remain outstanding. Awards outstanding under the Prior Plan will remain in effect until vested or forfeited under their terms.

Any employee of our company or an affiliate or a person who is a member of our Board of Directors or the board of directors of an affiliate is eligible to participate in the Plan if the Compensation Committee of the Board of Directors (the Administrator), in its sole discretion, determines that such person has contributed or can be expected to contribute to the profits or growth of our company or its affiliates (each, a participant). Under the terms of the Plan, we may grant participants stock awards, incentive awards, stock units, or options (which may be either incentive stock options or nonqualified stock options), or stock appreciation rights (SARs), which may be granted with a related option. Stock options entitle the participant to purchase a specified number of shares of our common stock at a price that is fixed by the Administrator at the time the option is granted; provided, however, that the price cannot be less than the shares' fair market value on the date of grant. The maximum period in which an option may be exercised is fixed by the Administrator at the time the option is granted but, in the case of an incentive stock option, cannot exceed 10 years. No participant may be granted or awarded, in any calendar year, shares, options, SARs, or stock units covering more than 10,000 shares of our common stock in the aggregate. For purposes of this limitation and the individual limitation on the grant of options, an option and corresponding SAR are treated as a single award. No participant may receive, in a single calendar year, an incentive award cash payment under the Plan exceeding \$2,000,000. A non-employee director may not be granted an incentive award and may not be granted more than 1,000 shares of common stock in a calendar year.

The maximum aggregate number of shares of our common stock that may be issued under the Plan is 250,000. At December 31, 2023, 248,885 shares were available for grant. During 2023, we granted 1,115 shares to five of our non-employee directors, which vested immediately.

A summary of activity during 2023 related to NewMarket's restricted stock and restricted stock units (stock awards) is presented below in whole shares:

	Number of Shares	Weighted Average Grant-Date Fair Value
Unvested stock awards at January 1, 2023	34,412	\$390.02
Granted in 2023	10,115	341.93
Vested in 2023	(7,441)	416.24
Forfeited in 2023	(1,668)	394.62
Unvested stock awards at December 31, 2023	35,418	370.56

The weighted average grant-date fair value was \$312.49 for stock awards granted in 2022 and \$392.63 for stock awards granted in 2021. The fair value of shares vested was \$3 million in 2023. No shares vested in 2022 and 2021. We recognized compensation expense of \$4 million in 2023, and \$2 million in both 2022 and 2021 related to stock awards. At December 31, 2023, total unrecognized compensation expense related to stock awards was \$5 million, which is expected to be recognized over a period of 2.5 years.

16. Leases

Our leases are for land, real estate, railcars, vehicles, pipelines, plant equipment, and office equipment. We have leases with remaining terms ranging from less than one year to 47 years. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants.

The components of lease cost were as follows:

	Years Ended December 31,			
(in thousands)	2023	2022	2021	
Operating lease cost	\$19,242	\$18,573	\$18,343	
Finance lease cost:				
Amortization of assets	2,547	2,771	2,795	
Interest on lease liabilities	657	712	517	
Short-term lease cost	2,463	6,246	6,607	
Variable lease cost	5,539	8,152	6,364	
Total lease cost	\$30,448	\$36,454	\$34,626	

Variable lease costs also include leases that do not have a right-of-use asset or lease liability but are capitalized as part of inventory.

Supplemental balance sheet information related to leases was as follows:

			Decemb	er 31,
(in thousands)	Balance Sheet Classification		2023	2022
Operating leases		_		
Right-of-use assets	Operating lease right-of-use assets		\$70,823	\$62,417
Current liability	Operating lease liabilities		\$15,074	\$15,569
Noncurrent liability			55,058	46,968
			\$70,132	\$62,537
Finance leases				
Right-of-use assets	Deferred charges and other assets .		\$34,771	\$36,893
Current liability	Other current liabilities		\$ 2,754	\$ 2,706
Noncurrent liability			19,844	22,433
			\$22,598	\$25,139
			December 31	
		2023	2022	2021
Weighted average remaining lease t	erm (in vears)			
Operating leases		12	12	12
Finance leases		14	15	16
Weighted average incremental borr				
Operating leases		4.07%	3.21%	3.02%
Finance leases		2.92%	2.72%	2.74%

Supplemental cash flow information related to leases was as follows:

	Years Ended December 31,		
(in thousands)	2023	2022	2021
Cash paid for amounts included in the measurement of lease			
liabilities			
Operating cash flows from operating leases	\$19,929	\$18,632	\$18,296
Operating cash flows from finance leases	656	712	517
Financing cash flows from finance leases	3,087	2,834	2,841
Right-of-use assets obtained in exchange for new lease			
obligations			
Operating leases	\$25,339	\$12,333	\$25,035
Finance leases	425	84	31,612

Maturities of lease liabilities at December 31, 2023 were as follows:

(in thousands)	Operating Leases	Finance Leases
2024	\$17,525	\$ 3,366
2025	15,356	3,333
2026	11,273	3,304
2027	7,720	3,285
2028	5,653	3,270
Thereafter	33,591	8,635
Total lease payments	91,118	25,193
Less: imputed interest	20,986	2,595
Total lease obligations	\$70,132	\$22,598

Operating lease payments in the table above include approximately \$16 million related to options to extend lease terms that are reasonably certain of being exercised. At December 31, 2023, we had commitments of approximately \$0.2 million related to railcar leases that have not yet commenced and are not included in the above table. These leases are expected to commence in 2024.

17. Pension Plans and Other Postretirement Benefits

NewMarket uses a December 31 measurement date for all of our plans.

The service cost component of net periodic benefit cost (income) is included in cost of goods sold; selling, general, and administrative expenses; or research, development, and testing expenses, to reflect where other compensation costs arising from services rendered by the pertinent employee are recorded on the Consolidated Statements of Income. The remaining components of net periodic benefit cost (income) are recorded in other income (expense), net on the Consolidated Statements of Income.

U.S. Retirement Plans

NewMarket sponsors four pension plans for all full-time U.S. employees that offer a benefit based primarily on years of service and compensation. Employees do not contribute to these pension plans. The plans are as follows:

- Salaried employees pension plan;
- Afton pension plan for union employees (the Sauget plan);
- NewMarket retirement income plan for union employees in Houston, Texas (the Houston plan); and
- Afton Chemical Additives pension plan for union employees in Port Arthur, Texas (the Port Arthur plan).

In addition, we offer an unfunded, nonqualified supplemental pension plan. This plan restores the pension benefits from our regular pension plans that would have been payable to designated participants if it were not for limitations imposed by U.S. federal income tax regulations. We also provide postretirement health care benefits and life insurance to eligible retired employees.

The components of net periodic pension and postretirement benefit cost (income), as well as other amounts recognized in other comprehensive income (loss), are shown below.

	Years Ended December 31,					
	Pension Benefits Postretirement Benefits				nefits	
(in thousands)	2023	2022	2021	2023	2022	2021
Net periodic benefit cost (income)						
Service cost	\$ 10,399	\$ 18,935	\$ 19,316	\$ 520	\$ 1,093	\$ 1,079
Interest cost	18,212	13,478	13,018	1,582	1,163	1,158
Expected return on plan assets	(46,039)	(43,765)	(38,675)	(781)	(790)	(907)
Amortization of prior service cost						
(credit)	186	271	271	(3,028)	(3,028)	(3,028)
Amortization of actuarial net (gain)						
loss	(1,598)	1,988	5,708	(275)	51	36
Net periodic benefit cost (income)	(18,840)	(9,093)	(362)	(1,982)	(1,511)	(1,662)
Other changes in plan assets and benefit						
obligations recognized in other						
comprehensive income (loss)						
Actuarial net (gain) loss	(34,997)	(17,083)	(79,688)	918	(12,445)	(257)
Prior service cost (credit)	648	86	(35)	0	0	0
Amortization of actuarial net gain						
(loss)	1,598	(1,988)	(5,708)	275	(51)	(36)
Amortization of prior service (cost)						
credit	(186)	(271)	(271)	3,028	3,028	3,028
Total recognized in other						
comprehensive income (loss)	(32,937)	(19,256)	(85,702)	4,221	(9,468)	2,735
Total recognized in net periodic						
benefit cost (income) and other						
comprehensive income (loss)	\$(51,777)	\$(28,349)	\$(86,064)	\$ 2,239	\$(10,979)	\$ 1,073
comprehensive mediae (1088)	Ψ(31,777)	Ψ(20,379)	Ψ(00,004)	Ψ 4,439	Ψ(10,779)	Ψ 1,073

Changes in the plans' benefit obligations and assets follow.

	December 31,			
	Pension	Benefits	Postretirem	ent Benefits
(in thousands)	2023	2022	2023	2022
Change in benefit obligation				
Benefit obligation at beginning of year	\$330,372	\$ 478,809	\$ 28,914	\$ 41,348
Service cost	10,399	18,935	520	1,093
Interest cost	18,212	13,478	1,582	1,163
Actuarial net (gain) loss	12,039	(166,409)	1,204	(12,064)
Plan amendment	648	86	0	0
Benefits paid	(15,757)	(14,527)	(2,388)	(2,626)
Benefit obligation at end of year	355,913	330,372	29,832	28,914
Change in plan assets				
Fair value of plan assets at beginning of year	545,540	663,193	20,734	20,972
Actual return on plan assets	93,075	(105,560)	1,067	1,171
Employer contributions	2,401	2,434	962	1,217
Benefits paid	(15,757)	(14,527)	(2,388)	(2,626)
Fair value of plan assets at end of year	625,259	545,540	20,375	20,734
Funded status	\$269,346	\$ 215,168	\$ (9,457)	\$ (8,180)
Amounts recognized in the Consolidated Balance Sheets				
Noncurrent assets	\$298,925	\$ 244,210	\$ 0	\$ 0
Current liabilities	(2,865)	(2,834)	(1,109)	(1,086)
Noncurrent liabilities	(26,714)	(26,208)	(8,348)	(7,094)
	\$269,346	\$ 215,168	\$ (9,457)	\$ (8,180)
Amounts recognized in accumulated other comprehensive loss				
Actuarial net (gain) loss	\$ (74,212)	\$ (40,813)	\$ (6,618)	\$ (7,811)
Prior service cost (credit)	607	145	(10,533)	(13,561)
	<u>\$ (73,605)</u>	<u>\$ (40,668)</u>	<u>\$(17,151)</u>	<u>\$(21,372)</u>

The accumulated benefit obligation for all domestic defined benefit pension plans was \$320 million at December 31, 2023 and \$296 million at December 31, 2022.

The fair market value of plan assets exceeded both the accumulated benefit obligation and projected benefit obligation for all domestic plans, except the nonqualified plan, at December 31, 2023 and December 31, 2022.

The net asset position for plans in which assets exceeded the projected benefit obligation is included in prepaid pension cost on the Consolidated Balance Sheets. The net liability position of plans in which the projected benefit obligation exceeded assets is included in other noncurrent liabilities on the Consolidated Balance Sheets.

A portion of the accrued benefit cost for the nonqualified plan is included in current liabilities at both December 31, 2023 and December 31, 2022. As the nonqualified plan is unfunded, the amount reflected in current liabilities represents the expected benefit payments related to the nonqualified plan during the following year.

The table below shows selected information on domestic defined benefit pension and postretirement plans.

	Decem	ber 31,
(in thousands)	2023	2022
Pension plans with the accumulated benefit obligation in excess of the fair market		
value of plan assets		
Accumulated benefit obligation	\$29,407	\$28,838
Fair market value of plan assets	0	0
Pension plans with the projected benefit obligation in excess of the fair market value of		
plan assets		
Projected benefit obligation	29,579	29,042
Fair market value of plan assets	0	0
Postretirement benefit plans with the accumulated postretirement benefit obligation in		
excess of the fair market value of plan assets		
Accumulated postretirement benefit obligation	18,372	17,782
Fair market value of plan assets	0	0

There are no assets held by the trustee for the retired beneficiaries of the nonqualified plan. Payments to retired beneficiaries of the nonqualified plan are made with cash from operations. The postretirement healthcare benefits are also unfunded and paid with cash from operations. The benefits from the postretirement life insurance plan are funded through an insurance contract.

Assumptions - We used the following assumptions to calculate the results of our retirement plans:

	Pension Benefits			Postretirement Bene		
	2023	2022	2021	2023	2022	2021
Weighted-average assumptions used to determine net						
periodic benefit cost (income) for years ended						
December 31,						
Discount rate	5.625%	2.875%	2.875%	5.625%	2.875%	2.875%
Expected long-term rate of return on plan assets	8.00%	8.00%	8.00%	4.00%	4.00%	4.50%
Rate of projected compensation increase	3.50%	3.50%	3.50%			
Weighted-average assumptions used to determine						
benefit obligations at December 31,						
Discount rate	5.375%	5.625%	2.875%	5.375%	5.625%	2.875%
Rate of projected compensation increase	3.50%	3.50%	3.50%			

For pension plans, we base the assumed expected long-term rate of return for plan assets on an analysis of our actual investments, including our asset allocation, as well as an analysis of expected returns. This analysis reflects the expected long-term rates of return for each significant asset class and economic indicator. The range of returns relies both on forecasts and on broad-market historical benchmarks for expected return, correlation, and volatility for each asset class. Our asset allocation is predominantly weighted towards equities. Through ongoing monitoring of our investments and review of market data, we have determined that we should maintain the expected long-term rate of return for our U.S. plans at 8.0% for the year beginning January 1, 2024. For the postretirement plan, we based the assumed expected long-term rate of return for plan assets on an evaluation of projected interest rates, as well as the guaranteed interest rate for our insurance contract. As a result of that evaluation, we have maintained the expected long-term rate of return at 4.0% for the year beginning January 1, 2024.

Plan Assets - Pension plan assets are held and distributed by trusts and consist principally of equity securities and investment-grade fixed income securities. We invest directly in equity securities, as well as in funds which primarily hold equity and debt securities. Our target allocation is 90% to 97% in equities, 3% to 10% in debt securities and 1% to 5% in cash.

The pension obligation is long-term in nature and the investment philosophy followed by the Pension Investment Committee is likewise long-term in its approach. The majority of the pension funds are invested in equity securities as, historically, equity securities have outperformed debt securities and cash investments, resulting in a higher investment return over the long-term. While in the short-term, equity securities may underperform other investment classes, we are less concerned with short-term results and more concerned with long-term improvement. The pension funds are managed by several different investment companies who predominantly invest in U.S. and international equities. Each investment company's performance is reviewed quarterly. A small portion of the funds is in investments such as cash and cash equivalents or short-term bonds, which historically has been less vulnerable to short-term market swings. These funds are used to provide the cash needed to meet our monthly obligations.

There are no significant concentrations of risk within plan assets, nor do the equity securities include any NewMarket common stock for any year presented.

The assets of the postretirement benefit plan are invested completely in an insurance contract. No NewMarket common stock is included in these assets.

The following table provides information on the fair value of our pension and postretirement benefit plans assets, as well as the related level within the fair value hierarchy. Investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified by level in the fair value hierarchy.

	December 31, 2023			December 31, 2022					
		Fair Value	Measureme	nts Using		Fair Value	Fair Value Measurements Usin		
(in thousands)	Fair Value	Level 1	Level 2	Level 3	Fair Value	Level 1	Level 2	Level 3	
Pension Plans									
Equity securities:									
U. S. companies	\$493,126	\$493,126	\$ 0	\$ 0	\$417,687	\$417,687	\$ 0	\$ 0	
International									
companies	20,970	20,970	0	0	19,022	19,022	0	0	
Cash and cash									
equivalents	9,956	9,956	0	0	18,979	18,979	0	0	
Pooled investment									
funds:									
Fixed income									
securities -									
mutual funds	27,108	27,108	0	0	29,838	29,838	0	0	
Equities - mutual									
fund	74,099	74,099	0	0	0	0	0	0	
Common collective									
trusts measured									
at net asset									
value	0				60,014				
	\$625,259	\$625,259	\$ 0	\$ 0	\$545,540	\$485,526	\$ 0	\$ 0	
	=======================================	=======================================	<u> </u>	-	=======================================	+ 100 ,0 = 0	-		
Postretirement Plans			***				***		
Insurance contract	\$ 20,375	\$ 0	\$20,375	\$ 0	\$ 20,734	\$ 0	\$20,734	\$ 0	

The valuation methodologies used to develop the fair value measurements for the investments in the previous table are outlined below. There have been no changes in the valuation techniques used to value the investments.

- Equity securities are valued at the closing price reported on a national exchange.
- Cash and cash equivalents are valued at cost.
- The mutual funds in pooled investment funds are valued at the closing price reported on a national exchange.
- The common collective trusts (the trusts) are valued at the net asset value of units held based on the quoted market value of the underlying investments held by the funds. One of the trusts invests primarily in a diversified portfolio of equity securities included in the S&P 500 index and the other trust invests primarily in a diversified portfolio of equity securities included in the Russell 1000 Value index. There are no restrictions on redemption for the index trusts and there were no unfunded commitments. We sold our interest in these trusts during 2023.
- The insurance contracts are unallocated funds deposited with an insurance company and are stated at an
 amount equal to the sum of all amounts deposited less the sum of all amounts withdrawn, adjusted for
 investment return.

Cash Flows - For U.S. plans, NewMarket expects to contribute \$3 million to our defined benefit pension plans and \$1 million to our postretirement benefit plan in 2024. The expected benefit payments for the next ten years are as follows.

(in thousands)	Expected Pension Benefit Payments	Expected Postretirement Benefit Payments
2024	\$ 16,760	\$2,284
2025	17,749	2,143
2026	18,631	2,032
2027	19,599	1,938
2028	20,583	1,871
2029 through 2033	117,705	9,181

Foreign Retirement Plans

For most employees of our foreign subsidiaries, NewMarket has defined benefit pension plans that offer benefits based primarily on years of service and compensation. These defined benefit plans provide benefits for employees of our foreign subsidiaries located in Belgium, the U.K., Germany, Canada, and Mexico. NewMarket generally contributes to investment trusts and insurance accounts to provide for these plans.

The components of net periodic pension cost (income), as well as other amounts recognized in other comprehensive income (loss), for these foreign defined benefit pension plans are shown below.

	Years Ended December 31,		
(in thousands)	2023	2022	2021
Net periodic benefit cost (income)			
Service cost	\$ 4,185	\$ 8,546	\$ 10,260
Interest cost	6,298	4,105	3,305
Expected return on plan assets	(11,841)	(9,827)	(10,659)
Amortization of prior service cost (credit)	138	137	152
Amortization of actuarial net (gain) loss	(24)	630	3,595
Net periodic benefit cost (income)	(1,244)	3,591	6,653
Other changes in plan assets and benefit obligations recognized in other comprehensive income (loss)			
Actuarial net (gain) loss	(5,143)	(41,108)	(38,259)
Amortization of actuarial net gain (loss)	24	(630)	(3,595)
Amortization of prior service (cost) credit	(138)	(137)	(152)
Total recognized in other comprehensive income (loss)	(5,257)	(41,875)	(42,006)
Total recognized in net periodic benefit cost (income) and other			
comprehensive income (loss)	\$ (6,501)	<u>\$(38,284)</u>	<u>\$(35,353)</u>

Changes in the benefit obligations and assets of the foreign defined benefit pension plans follow.

	Decemb	oer 31,
(in thousands)	2023	2022
Change in benefit obligation		
Benefit obligation at beginning of year	\$135,800	\$235,347
Service cost	4,185	8,546
Interest cost	6,298	4,105
Employee contributions	673	693
Actuarial net (gain) loss	(577)	(87,076)
Benefits paid	(5,560)	(5,403)
Settlements	(2,510)	0
Foreign currency translation	7,399	(20,412)
Benefit obligation at end of year	145,708	135,800
Change in plan assets		<u> </u>
Fair value of plan assets at beginning of year	174,548	230,389
Actual return on plan assets	16,326	(34,748)
Employer contributions	6,778	5,981
Employee contributions	673	693
Benefits paid	(5,560)	(5,403)
Settlements	(2,510)	0
Foreign currency translation	10,048	(22,364)
Fair value of plan assets at end of year	200,303	174,548
Funded status	\$ 54,595	\$ 38,748
Amounts recognized in the Consolidated Balance Sheets		
Noncurrent assets	\$ 71,957	\$ 58,374
Current liabilities	(354)	(321)
Noncurrent liabilities	(17,008)	(19,305)
	\$ 54,595	\$ 38,748
Amounts recognized in accumulated other comprehensive loss		
Actuarial net (gain) loss	\$ (3,413)	\$ 1,706
Prior service cost (credit)	394	532
,	\$ (3,019)	\$ 2,238
	φ (3,019)	Ψ 2,236

The settlements in the table above are the result of a number of long-tenured employees in our Belgium plan retiring in 2023 with lump sum distributions.

The accumulated benefit obligation for all foreign defined benefit pension plans was \$134 million at December 31, 2023 and \$122 million at December 31, 2022.

The fair market value of plan assets exceeded both the accumulated benefit obligation and projected benefit obligation for the Canada and U.K. plans at both year-end 2023 and 2022. The net asset position of the Canada and U.K. plans are included in prepaid pension cost on the Consolidated Balance Sheets at December 31, 2023 and December 31, 2022. The accumulated benefit obligation and projected benefit obligation exceeded the fair market value of plan assets for the Germany, Belgium, and Mexico plans at December 31, 2023 and December 31, 2022. The accrued benefit cost of these plans is included in other noncurrent liabilities on the Consolidated Balance Sheets for both years.

As the Germany plan is unfunded, a portion of the accrued benefit cost is included in current liabilities at year-end 2023 and 2022, reflecting the expected benefit payments related to the plan for the following year.

The table below shows selected information on foreign defined benefit pension plans.

		December 31,	
(in thousands)	202	23	2022
Pension plans with the accumulated benefit obligation in excess of the fair market			
value of plan assets			
Accumulated benefit obligation	\$22,	762	\$22,625
Fair market value of plan assets	13,	420	13,072
Pension plans with the projected benefit obligation in excess of the fair market value of			
plan assets			
Projected benefit obligation		783	32,699
Fair market value of plan assets	13,	420	13,072
Assumptions - We used the following weighted-average assumptions to calculate the results of our foreign			
defined benefit pension plans.			
<u>-</u>	2023	2022	2021
Weighted-average assumptions used to determine net periodic benefit cost (income)			
for the years ended December 31,			
Discount rate	4.61%	1.91	% 1.14%
Expected long-term rate of return on plan assets	5.47%	4.59	% 4.95%
Rate of projected compensation increase	3.55%	4.07	% 3.94%
Weighted-average assumptions used to determine benefit obligations at			
December 31,			
Discount rate	4.60%	4.61	% 1.91%
Rate of projected compensation increase	3.52%	3.55	% 4.07%

The actuarial assumptions used to measure the foreign defined benefit pension plans are based upon the circumstances of each particular country and pension plan. The factors impacting the determination of the long-term rate of return for a particular foreign pension plan include the market conditions within a particular country, as well as the investment strategy and asset allocation of the specific plan.

Plan Assets - Pension plan assets vary by foreign location and plan. Assets are held and distributed by trusts and, depending upon the foreign location and plan, consist primarily of pooled equity funds, pooled debt securities funds, pooled diversified funds, equity securities, debt securities, cash, and insurance contracts. The combined weighted-average target allocation of our foreign defined benefit pension plans is 39% in equities (including pooled funds), 37% in debt securities (including pooled funds), 5% in insurance contracts, and 19% in pooled diversified funds.

While the pension obligation is long-term in nature for each of our foreign plans, the investment strategies followed by each plan vary to some degree based upon the laws of a particular country, as well as the provisions of the specific pension trust. The U.K. and Canada plans are invested predominantly in equity securities funds, diversified funds, and debt securities funds. The funds of these plans are managed by various trustees and investment companies whose performance is reviewed throughout the year. The Belgium plan is invested in an insurance contract. The Mexico plans are invested in mutual funds, equities, and debt securities. The Germany plan has no assets.

There are no significant concentrations of risk within plan assets, nor do the equity securities include any NewMarket common stock for any year presented.

The following table provides information on the fair value of our foreign defined benefit pension plans assets, as well as the related level within the fair value hierarchy. Investments that are measured at fair value using net asset value per share (or its equivalent) have not been classified by level in the fair value hierarchy.

		December	r 31, 2023			December	r 31, 2022	
		Fair Val	ue Measurem	ents Using		Fair Val	ue Measurem	ents Using
(in thousands)	Fair Value	Level 1	Level 2	Level 3	Fair Value	Level 1	Level 2	Level 3
Insurance contract Equity securities - international	\$ 10,956	\$ 0	\$10,956	\$ 0	\$ 11,199	\$ 0	\$11,199	\$ 0
companies	45	45	0	0	492	492	0	0
Debt securities Pooled investment funds - mutual	273	273	0	0	734	734	0	0
funds Cash and cash	1,763	1,763	0	0	647	647	0	0
equivalents Pooled investment funds (measured at net asset value): Equity securities - international	1,187	1,187	0	0	384	384	0	0
companies Debt	92,853				76,177			
securities Diversified growth	52,682				49,494			
funds	40,544				35,421			
	\$200,303	\$3,268	\$10,956	\$ 0	\$174,548	\$2,257	\$11,199	\$ 0

The valuation methodologies used to develop the fair value measurements for the investments in the table above are outlined below. There have been no changes in the valuation techniques used to value the investments.

- The insurance contract represents funds deposited with an insurance company and is stated at an amount equal to the sum of all amounts deposited less the sum of all amounts withdrawn, adjusted for investment return.
- Equity securities are valued at the closing price reported on a national exchange.
- Debt securities are valued by quoted market prices or valued based on yields currently available on comparable securities of issuers with similar credit ratings.
- Pooled investment mutual funds are valued at the closing price reported on a national exchange.
- Cash and cash equivalents are valued at cost.
- The pooled investment funds are valued at the net asset value of units held by the plans based on the quoted market value of the underlying investments held by the fund. The U.K. pension plan is invested in units of life insurance policies that are linked to equity securities funds, government bond funds, and diversified growth funds. The underlying assets of the equity funds, bond funds, and diversified growth funds are traded on a national exchange and are based on tracking various indices of the London Stock Exchange. There are no redemption restrictions on these funds. There were no unfunded commitments for the U.K. pension plan funds. The Canada pension plan is invested in a pooled Canadian equity fund and a pooled diversified fund. The Canadian equity fund invests in a diversification (sector and industry) of equities listed on a recognized Canadian exchange. The diversified fund invests in a diversified mix of equities, fixed income securities, cash, and cash equivalent securities. There are no redemption restrictions on the pooled Canadian funds, and there were no unfunded commitments.

Cash Flows - For foreign defined benefit pension plans, NewMarket expects to contribute \$7 million to the plans in 2024. The expected benefit payments for the next ten years for our foreign defined benefit pension plans are shown in the following table.

(in thousands)	Expected Pension Benefit Payments
2024	\$ 7,117
2025	5,593
2026	6,013
2027	6,640
2028	7,732
2029 through 2033	41,544

18. Income Taxes

Our income before income tax expense, as well as our provision for income taxes is shown in the table below.

	Years Ended December 31,			
(in thousands)	2023	2022	2021	
Income before income tax expense				
Domestic	\$301,152	\$170,785	\$ 97,245	
Foreign	187,810	176,949	150,306	
	\$488,962	\$347,734	\$247,551	
Income tax expense				
Current income taxes				
Federal	\$ 61,693	\$ 57,778	\$ 13,166	
State	16,616	12,515	7,639	
Foreign	36,539	40,548	33,860	
	114,848	110,841	54,665	
Deferred income taxes				
Federal	(16,384)	(34,088)	1,232	
State	(697)	(8,491)	38	
Foreign	2,331	(66)	708	
	(14,750)	(42,645)	1,978	
Total income tax expense	\$100,098	\$ 68,196	\$ 56,643	

The reconciliation of the U.S. federal statutory rate to the effective income tax rate follows.

	% of Income Before Income Tax Expense		
	2023	2022	2021
Federal statutory rate	21.0%	21.0%	21.0%
State taxes, net of federal tax	2.6	0.9	2.4
Foreign operations	0.5	1.4	2.4
Research tax credit	(1.4)	(1.6)	(2.2)
Foreign-derived intangible tax benefit	(2.0)	(3.0)	(0.7)
Taxes applicable to prior years	(1.4)	(0.1)	(0.4)
Other items and adjustments	1.2	1.0	0.4
Effective income tax rate	<u>20.5</u> %	19.6%	22.9%

Our deferred income tax assets and liabilities follow.

	Decem	ber 31,
(in thousands)	2023	2022
Deferred income tax assets		
Capitalized research expenses	\$ 81,730	\$ 53,249
Lease liabilities	14,511	11,868
Operating loss and credit carryforwards	15,952	15,336
Foreign currency translation adjustments	4,567	5,261
Other	12,100	14,159
Gross deferred income tax assets	128,860	99,873
Valuation allowance	(13,437)	(13,012)
Total deferred income tax assets	115,423	86,861
Deferred income tax liabilities		
Depreciation and amortization	81,767	78,058
Future employee benefits	71,822	52,446
Lease assets	14,965	12,174
Other	2,800	2,601
Total deferred income tax liabilities	171,354	145,279
Net deferred income tax (liabilities) assets	\$(55,931)	\$ (58,418)

Net deferred income tax (liabilities) assets in the table above are reflected in the Consolidated Balance Sheets on a net jurisdictional basis. Deferred income tax assets are included in deferred charges and other assets. See Note 11. Deferred income tax liabilities are included in other noncurrent liabilities. See Note 14.

Our deferred taxes are in a net liability position at December 31, 2023. Our deferred tax assets include \$16 million of foreign operating loss carryforwards, foreign capital loss carryforwards, foreign non-trading deficit carryforwards, and foreign and state tax credits. The operating loss carryforwards expire in 2028 through 2041 and certain tax credits expire in 2026 through 2027. Based on current forecasted operating plans and historical profitability, we believe that we will recover the full benefit of our deferred tax assets with the exception of certain of the aforementioned operating loss, capital loss, and tax credit carryforwards. Therefore, as of December 31, 2023, we have recorded a valuation allowance of \$13 million. During 2022 and 2023, we did not release any valuation allowances.

We do not expect to distribute earnings from our foreign subsidiaries in a manner that would result in significant U.S. tax, as these earnings have been previously taxed in the U.S. or meet the requirements for a dividends received deduction. As of December 31, 2022 and December 31, 2023, we have an immaterial deferred tax liability for withholding taxes that will not be creditable upon distribution.

We have not provided a deferred tax liability on approximately \$74 million of temporary differences related to investments in foreign subsidiaries that are essentially permanent in duration, as these earnings are considered to be indefinitely reinvested. If we were to repatriate these earnings, we could be subject to income taxes and withholding taxes in various countries. Determination of the amount of unrecognized deferred income tax liability is not practicable due to the complexity associated with the hypothetical calculation.

A reconciliation of the beginning and ending balances of the unrecognized tax benefits from uncertain positions is as follows:

		December 31,		
(in thousands)	2023	2022	2021	
Balance at beginning of year	\$ 7,879	\$6,374	\$6,905	
Increases for tax positions of prior years	1,374	1,677	0	
Increases for tax positions of the current year	1,543	809	698	
Settlements	(1,078)	0	(247)	
Lapses of statutes	(1,337)	(981)	(982)	
Balance at end of year	\$ 8,381	\$7,879	\$6,374	

At December 31, 2023, all of the amount of unrecognized tax benefits, if recognized, would affect our effective tax rate.

We expect the amount of unrecognized tax benefits to change in the next twelve months; however, we do not expect the change to have a material impact on our financial statements.

Our U.S. subsidiaries file a U.S. federal consolidated income tax return. We are currently under examination by various U.S. state and foreign jurisdictions and remain subject to examination until the statute of limitations expires for the respective tax jurisdiction. We are no longer subject to U.S. federal income examination for years before 2020, with the exception of 2017. Foreign and U.S. state jurisdictions have statutes of limitations generally ranging from 3 years to 5 years. Years still open to examination by foreign tax authorities in major jurisdictions include: the U.K. (2020 and forward); Singapore (2019 and forward); Belgium (2019 and forward); and Mexico (2018 and forward).

19. Fair Value Measurements

The carrying amount of cash and cash equivalents in the Consolidated Balance Sheets, as well as the fair value, was \$112 million at December 31, 2023 and \$69 million at December 31, 2022. The fair value is categorized in Level 1 of the fair value hierarchy.

No material events occurred during 2023 requiring adjustment to the recognized balances of assets or liabilities which are recorded at fair value on a nonrecurring basis.

Long-term debt - We record the carrying amount of our long-term debt at historical cost, less deferred financing costs related to our outstanding senior notes. The estimated fair value of our long-term debt is shown in the table below and is based primarily on estimated current rates available to us for debt of the same remaining duration and adjusted for nonperformance risk and credit risk. The estimated fair value of our publicly traded outstanding senior notes included in long-term debt in the following table is based on the last quoted price closest to December 31 of each year. The fair value of our debt instruments is categorized as Level 2.

	December 31, 2023		December 31, 2022	
(in thousands)	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Long-term debt	\$643,622	\$572,983	\$1,003,737	\$906,891

20. Commitments and Contingencies

Contractual Commitments - We have non-lease contractual obligations for the construction of assets, as well as purchases of property and equipment, of approximately \$13 million at December 31, 2023, all of which are due within five years. From time to time, we also have commitments for leases which have not yet commenced. See Note 16.

Purchase Obligations - We have purchase obligations for goods or services that are enforceable, legally binding, and specify all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum, or variable price provisions; and the approximate timing of the transaction. Purchase obligations exclude agreements that are cancelable without penalty. Purchase orders made in the ordinary course of business are excluded from this amount. Any amounts for which we are liable under purchase orders are reflected in our Consolidated Balance Sheets as accounts payable or accrued expenses.

Future payments for purchase obligations as of December 31, 2023 are (in thousands):

2024	\$12,535
2025	12,045
2026	10,662
2027	10,620
2028	2,589
After 2028	4,507

Litigation - We are involved in legal proceedings that are incidental to our business and may include administrative or judicial actions. Some of these legal proceedings involve governmental authorities and relate to environmental matters. For further information, see Environmental below and Item 1 of this Form 10-K.

While it is not possible to predict or determine with certainty the outcome of any legal proceeding, we believe the outcome of any of these proceedings, or all of them combined, will not result in a material effect on our financial statements.

Asbestos

We are a defendant in personal injury lawsuits involving exposure to asbestos. These cases involve exposure to asbestos in premises owned or operated, or formerly owned or operated, by subsidiaries of NewMarket. We have never manufactured, sold, or distributed products that contain asbestos. Nearly all of these cases are pending in Texas, Louisiana, or Illinois and involve multiple defendants. We maintain an accrual for these proceedings, as well as a receivable for expected insurance recoveries.

The accrual for our premises asbestos liability related to currently asserted claims is based on the following assumptions and factors:

- We are often one of many defendants. This factor influences both the number of claims settled against us and the indemnity cost associated with such resolutions.
- The estimated percent of claimants that, after discovery, will actually pursue a claim against us, out of the total number of claimants, is based on a level consistent with past experience and current trends.
- We utilize average comparable plaintiff cost history as the basis for estimating pending premises
 asbestos-related claims. These claims are filed by both former contractors and former employees who
 worked at past and present company locations. We also include an estimated inflation factor in the
 calculation.

- No estimate is made for unasserted claims.
- The estimated recoveries from insurance and Albemarle Corporation (a former operation of our company) for these cases are based on, and are consistent with, the 2005 settlement agreements with The Travelers Indemnity Company.

Based on the above assumptions, we have provided an undiscounted liability related to premises asbestos claims of \$7 million at both December 31, 2023 and December 31, 2022. The liabilities related to premises asbestos claims are included in accrued expenses (current portion) and other noncurrent liabilities on the Consolidated Balance Sheets. Certain of these costs are recoverable through the settlement agreements with The Travelers Indemnity Company and with Albemarle Corporation. The receivable for these recoveries related to premises asbestos liabilities was \$4 million at both December 31, 2023 and December 31, 2022. These receivables are included in trade and other accounts receivable, net on the Consolidated Balance Sheets for the current portion. The noncurrent portion is included in deferred charges and other assets.

Environmental - We are involved in environmental proceedings and potential proceedings relating to soil and groundwater contamination, disposal of hazardous waste, and other environmental matters at several of our current or former facilities, or at third-party sites where we have been designated as a PRP. While we believe we are currently adequately accrued for known environmental issues, it is possible that unexpected future costs could have a significant impact on our financial statements. Our total accruals for environmental remediation, dismantling, and decontamination were approximately \$11 million at December 31, 2023 and \$10 million at December 31, 2022. Of the total accrual, the current portion is included in accrued expenses and the noncurrent portion is included in other noncurrent liabilities on the Consolidated Balance Sheets.

Our more significant environmental sites include a former plant site in Louisiana (the Louisiana site) and a Houston, Texas plant site (the Texas site). Together, the amounts accrued on a discounted basis related to these sites represented approximately \$9 million of the total accrual at December 31, 2023 and \$8 million at December 31, 2022, using discount rates ranging from 3% to 9%. The aggregate undiscounted amount for these sites was \$11 million at December 31, 2023 and \$10 million at December 31, 2022. Of the total accrued for these two sites, the amount related to remediation of groundwater and soil was \$4 million for each of the Louisiana site and Texas site at December 31, 2023 and \$3 million for the Louisiana site and \$4 million for the Texas site at December 31, 2022.

21. Other Comprehensive Income (Loss) and Accumulated Other Comprehensive Loss

The balances of, and changes in, the components of accumulated other comprehensive loss, net of tax, consist of the following:

(in thousands)	Pension Plans and Other Postretirement Benefits	Foreign Currency Translation Adjustments	Accumulated Other Comprehensive (Loss) Income
Balance at December 31, 2020	\$(92,771)	\$ (80,393)	\$(173,164)
Other comprehensive income (loss) before reclassifications	89,194	(3,356)	85,838
comprehensive loss (a)	5,099	0	5,099
Other comprehensive income (loss)	94,293	(3,356)	90,937
Balance at December 31, 2021	1,522	(83,749)	(82,227)
Other comprehensive income (loss) before reclassifications	53,019	(42,808)	10,211
comprehensive loss (a)	21	0	21
Other comprehensive income (loss)	53,040	(42,808)	10,232
Balance at December 31, 2022	54,562	(126,557)	(71,995)
Other comprehensive income (loss) before reclassifications	28,907	25,520	54,427
comprehensive loss (a)	(3,503)	0	(3,503)
Other comprehensive income (loss)	25,404	25,520	50,924
Balance at December 31, 2023	\$ 79,966	\$(101,037)	\$ (21,071)

⁽a) The pension plan and other postretirement benefit components of accumulated other comprehensive loss are included in the computation of net periodic benefit cost (income). See Note 17 for further information.

22. Recent Accounting Pronouncements

In November 2023, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2023-07, "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures" (ASU 2023-07). ASU 2023-07 requires expanded disclosures about reportable segments including additional information on segment expenses, expanded interim period disclosures, and an explanation of how the chief operating decision maker utilizes segment information in evaluating segment performance. ASU 2023-07 is effective for our reporting period beginning January 1, 2024 with the interim period requirements effective for our reporting period beginning January 1, 2025. We are currently assessing the impact that the adoption of ASU 2023-07 will have on the disclosures in our consolidated financial statements.

In December 2023, the FASB issued Accounting Standards Update No. 2023-09, "Income Taxes (Topic 740): Improvements to Income Tax Disclosures" (ASU 2023-09). The FASB issued ASU 2023-09 to enhance the transparency and decision-making usefulness of income tax disclosures by requiring additional information on an entity's tax rate reconciliation, as well as income taxes paid. ASU 2023-09 is effective for our reporting period beginning January 1, 2025. We are currently assessing the impact that the adoption of ASU 2023-09 will have on the disclosures in our consolidated financial statements.

23. Subsequent Events

AMPAC Acquisition

On January 16, 2024, we completed the acquisition of AMPAC Intermediate Holdings, LLC, the ultimate parent company of American Pacific Corporation (AMPAC), for approximately \$700 million. AMPAC manufactures and sells critical performance additives used in solid rocket motors for space launch and military defense applications. AMPAC also manufactures and sells Halotron BrX, a fire extinguishing agent that replaces legacy high ozone-depleting fire extinguishing agents. The acquisition was funded by cash on hand and borrowings under our revolving credit facility.

A preliminary purchase price allocation and any required pro forma financial disclosures required by Accounting Standards Codification 805 - Business Combinations will be included in the Quarterly Report on Form 10-Q for the quarter ending March 31, 2024.

Debt Agreements

On January 22, 2024, NewMarket and certain foreign subsidiary borrowers entered into a credit agreement for a new \$900 million revolving credit facility (the Revolving Credit Agreement). The revolving credit facility matures on January 22, 2029 and includes a \$500 million sublimit for multicurrency borrowings, an initial letter of credit sublimit of \$25 million and a \$20 million sublimit for swingline loans. The Revolving Credit Agreement includes an expansion feature allowing us, subject to certain conditions, to request an increase in the aggregate amount of the revolving credit facility or obtain incremental term loans in an amount up to \$450 million. We may also request an extension of the maturity date as provided for in the Revolving Credit Agreement.

Borrowings made under the revolving credit facility bear interest at a variable rate determined, at our option, at an annual rate equal to (i) the Base Rate, (ii) Term SOFR, (iii) the Weekly Adjusted Term SOFR, (iv) the Alternative Currency Term Rate, or (v) the Alternative Currency Daily Rate, each plus the Applicable Rate and all as defined in the Revolving Credit Agreement. The Applicable Rate is based, at our option, on either our Leverage Ratio or Ratings Level. All capitalized terms are as defined in the Revolving Credit Agreement.

Also on January 22, 2024, NewMarket entered into a credit agreement for a \$250 million term loan (the Term Loan Credit Agreement). The term loan matures on January 22, 2026. NewMarket is required to repay the principal amount borrowed under the term loan in full at maturity. We may, in our sole discretion and subject to the conditions set forth in the Term Loan Credit Agreement, prepay amounts borrowed under the term loan, together with any accrued and unpaid interest, prior to maturity. Any amounts prepaid prior to maturity are not available for additional borrowings by NewMarket.

The principal amount borrowed under the term loan initially bears interest at a variable rate equal to Term SOFR plus the Applicable Rate. We may, at our option, elect for outstanding portions of the principal amount to instead bear interest at a variable rate equal to the Base Rate or Weekly Adjusted Term SOFR, plus, in each case, the Applicable Rate, subject to the conditions set forth in the Term Loan Credit Agreement. Similar to the revolving credit facility, the Applicable Rate is based, at our option, on either our Leverage Ratio or Ratings Level. All capitalized terms are as defined in the Term Loan Credit Agreement.

The obligations under the revolving credit facility and the term loan are unsecured and the obligations under the revolving credit facility are fully and unconditionally guaranteed by NewMarket.

Both the revolving credit facility and the term loan contain certain customary covenants, including financial covenants that require NewMarket to maintain a consolidated Leverage Ratio (as defined in each of the agreements) of no more than 3.75 to 1.00 except during an Increased Leverage Period (as defined in each of the agreements).

Concurrently with our entry into the Revolving Credit Agreement and the Term Loan Credit Agreement, we terminated our former revolving credit facility dated as of March 5, 2020. See Note 13. Upon termination, we repaid the amount outstanding under the former revolving credit facility, plus accrued and unpaid interest. NewMarket borrowed the entire \$250 million available under the Term Loan Credit Agreement and approximately \$465 million under the Revolving Credit Agreement to repay the amounts outstanding under the former revolving credit facility.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain a system of internal control over financial reporting to provide reasonable, but not absolute, assurance of the reliability of the financial records and the protection of assets. Under Rule 13a-15(b) of the Securities Exchange Act of 1934 (the Exchange Act), we carried out an evaluation, with the participation of our management, including our principal executive officer and our principal financial officer, of the effectiveness of our disclosure controls and procedures, as such term is defined in Rule 13a-15(e) of the Exchange Act, as of the end of the period covered by this report. Based upon that evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures are effective at the reasonable assurance level.

There has been no change in our internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act, during the quarter ended December 31, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act.

Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of
 financial statements in accordance with accounting principles generally accepted in the United States
 of America and that our receipts and expenditures are being made only in accordance with
 authorization of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in "Internal Control - Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under that framework, our management concluded that our internal control over financial reporting was effective at the

reasonable assurance level as of December 31, 2023. The effectiveness of our internal control over financial reporting as of December 31, 2023, has been audited by PricewaterhouseCoopers LLP (PCAOB ID 238), an independent registered public accounting firm, as stated in their report, which is included in Item 8 of this Annual Report on Form 10-K.

ITEM 9B. OTHER INFORMATION

During the quarter ended December 31, 2023, no director or officer (as defined in Rule 16a-1(f) under the Exchange Act) of NewMarket Corporation adopted or terminated a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement," as each term is defined in Item 408(a) or Regulation S-K.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is incorporated by reference to our definitive Proxy Statement for our 2024 annual meeting of shareholders (Proxy Statement) under the headings entitled "Election of Directors," "Committees of Our Board," "Certain Relationships and Related Transactions," and "Delinquent Section 16(a) Reports" and is included in Part I of this Form 10-K under the heading entitled "Information about our Executive Officers."

We have adopted a Code of Conduct that applies to our directors, officers, and employees (including our principal executive officer, principal financial officer, and principal accounting officer) and have posted the Code of Conduct on our internet website. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K relating to amendments to or waivers from any provision of our Code of Conduct applicable to the principal executive officer, principal financial officer, and principal accounting officer by posting this information on our internet website. Our internet website address is www.newmarket.com.

We have filed, as exhibits to this Annual Report on Form 10-K, the certifications of our principal executive officer and principal financial officer required under Sections 906 and 302 of the Sarbanes Oxley Act of 2002 to be filed with the SEC regarding the quality of our public disclosure.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference to our Proxy Statement under the headings (including the narrative disclosures following a referenced table) entitled "Compensation Discussion and Analysis," "The Compensation Committee Report," "Compensation of Executive Officers," and "Compensation of Directors."

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Except as noted below, the information required by this item is incorporated by reference to our Proxy Statement under the heading "Stock Ownership."

The following table presents information as of December 31, 2023 with respect to equity compensation plans under which shares of our common stock are authorized for issuance.

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Future Issuance Under Equity
Equity compensation plans approved by shareholders:			
2023 Incentive Compensation and Stock Plan	0	\$0	248,885
Equity compensation plans not approved by shareholders (b)	0	_0	0
Total	0	<u>\$0</u>	248,885

⁽a) There are no outstanding options, rights, or warrants.

⁽b) We do not have any equity compensation plans that have not been approved by shareholders.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference to our Proxy Statement under the headings entitled "Board of Directors" and "Certain Relationships and Related Transactions."

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is incorporated by reference to our Proxy Statement under the heading "Ratification of Appointment of Independent Registered Public Accounting Firm."

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(A)(1) Management's Report on Internal Control Over Financial Reporting

Report of Independent Registered Public Accounting Firm

Consolidated Statements of Income for each of the three years in the period ended December 31, 2023

Consolidated Statements of Comprehensive Income for each of the three years in the period ended December 31, 2023

Consolidated Balance Sheets as of December 31, 2023 and 2022

Consolidated Statements of Shareholders' Equity for each of the three years in the period ended December 31, 2023

Consolidated Statements of Cash Flows for each of the three years in the period ended December 31, 2023

Notes to Consolidated Financial Statements

- (A)(2) Financial Statement Schedules none required
- (A)(3) Exhibits
 - 3.1 Articles of Incorporation Amended and Restated effective April 27, 2012 (incorporated by reference to Exhibit 3.1 to Form 8-K (File No. 1-32190) filed April 30, 2012)
 - 3.2 NewMarket Corporation Bylaws Amended and Restated effective August 6, 2015 (incorporated by reference to Exhibit 3.1 to Form 8-K (File No. 1- 32190) filed August 6, 2015)
 - 4.1 Description of Company's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934, (incorporated by reference to Exhibit 4.1 to Form 10-K (File No. 1-32190) filed February 16, 2021)
 - 4.2 Indenture, dated as of March 18, 2021, between NewMarket Corporation and Wells Fargo Bank, National Association, as trustee (as succeeded by U.S. Bank Trust Company, National Association) (incorporated by reference to exhibit 4.1 to Form 8-K (File No. 1- 32190) filed March 18, 2021)
 - 4.3 First Supplemental Indenture, dated as of March 18, 2021, between NewMarket Corporation and Wells Fargo Bank, National Association, as trustee (as succeeded by U.S. Bank Trust Company, National Association) (incorporated by reference to exhibit 4.2 to Form 8-K (File No. 1- 32190) filed March 18, 2021)
 - 4.4 Form of 2.70% Senior Notes due 2031 (form included as Exhibit A to the First Supplemental Indenture (incorporated by reference to exhibit 4.3 to Form 8-K (File No. 1- 32190) filed March 18, 2021)
 - 10.1 Note Purchase Agreement dated January 4, 2017, by and among NewMarket Corporation, The Prudential Life Insurance Company of America, The Gibraltar Life Insurance Co., Ltd, The Lincoln National Life Insurance Company and The Prudential Life Insurance Company, Ltd., (incorporated by reference to Exhibit 10.1 to Form 8-K (File No. 1-32190) filed January 5, 2017)
 - 10.2 First Amendment, dated as of October 10, 2017, to Note Purchase Agreement dated January 4, 2017, by and among NewMarket Corporation, The Prudential Insurance Company of America, The Gibraltar Life Insurance Co., Ltd, The Lincoln National Life Insurance Company and The Prudential Life Insurance Company, Ltd. (incorporated by reference to Exhibit 10.2 to Form 10-Q (file No. 1-32190) filed October 26, 2017)

- 10.3 Second Amendment, dated as of March 19, 2020, to the Note Purchase agreement dated January 4, 2017, by and among NewMarket Corporation, The Prudential Insurance Company of America, The Gibraltar Life Insurance Co., Ltd, The Lincoln National Life Insurance Company and The Prudential Life Insurance Company, Ltd (incorporated by reference to Exhibit 10.2 to Form 10-Q (file No. 1-32190) filed April 23, 2020)
- 10.4 2023 Incentive Compensation and Stock Plan (incorporated by reference to Exhibit 10.1 to Form 10-Q (File No. 1-32190) filed July 27, 2023)*
- 10.5 Excess Benefit Plan (incorporated by reference to Exhibit 10.4 to Ethyl Corporation's Form 10-K (File No. 1-5112) filed February 25, 1993)*
- 10.6 Trust Agreement between Ethyl Corporation and Merrill Lynch Trust Company of America (incorporated by reference to Exhibit 4.5 to Ethyl Corporation's Registration Statement on Form S-8 (Registration No. 333-60889) filed August 7, 1998)
- 10.7 NewMarket Corporation and Affiliates Bonus Plan (incorporated by reference to Exhibit 10.9 to Ethyl Corporation's Form 10-K (File No. 1-5112) filed March 14, 2003)*
- 10.8 Indemnification Agreement, dated as of July 1, 2004 by and among NewMarket Corporation, Ethyl Corporation and Afton Chemical Corporation (incorporated by reference to Exhibit 10.5 to Form 10-Q (File No. 1-32190) filed August 5, 2004)
- 10.9 Summary of Directors' Compensation*
- 10.10 Form of Restricted Stock Award Agreement (incorporated by reference to Exhibit 10.13 to Form 10-K (File No. 1-32190) filed February 19, 2019)*
- 10.11 Form of Performance Stock Award Agreement (incorporated by reference to Exhibit 10.1 to Form 8-K (File No. 1-32190) filed February 26, 2018)*
- 10.12 Credit Agreement, dated as of March 5, 2020, by and among the Company and the Foreign Subsidiary Borrowers party thereto; the Lenders party thereto; JPMorgan Chase Bank, N.A., as Administrative Agent; Bank of America, N.A., as Syndication Agent; U.S. Bank National Association, Citibank, N.A., Wells Fargo Bank, National Association, and DBS Bank Ltd., as Co-Documentation Agents; and Bank of the West and TD Bank, N.A., as Senior Managing Agents (incorporated by reference to Exhibit 10.1 to Form 8-K (file No. 1-32190) filed March 11, 2020)
- 10.13 Amendment No. 1, dated November 5, 2021, to the Credit Agreement dated March 5, 2020, by and among the Company and the Foreign Subsidiary Borrowers party thereto; the Lenders party thereto; JPMorgan Chase Bank, N.A., as Administrative Agent; Bank of America, N.A., as Syndication Agent; U.S. Bank National Association, Citibank, N.A., Wells Fargo Bank, National Association, and DBS Bank Ltd., as Co-Documentation Agents; and Bank of the West and TD Bank, N.A., as Senior Managing Agents (incorporated by reference to Exhibit 10.16 to Form 10-K (File No. 1-32190) filed February 15, 2023)
- 10.14 Amendment No. 2, dated January 11, 2023, to the Credit Agreement dated March 5, 2020, by and among the Company and the Foreign Subsidiary Borrowers party thereto; the Lenders party thereto; JPMorgan Chase Bank, N.A., as Administrative Agent; Bank of America, N.A., as Syndication Agent; U.S. Bank National Association, Citibank, N.A., Wells Fargo Bank, National Association, and DBS Bank Ltd., as Co-Documentation Agents; and Bank of the West and TD Bank, N.A., as Senior Managing Agents (incorporated by reference to Exhibit 10.17 to Form 10-K (File No. 1-32190) filed February 15, 2023)
- 10.15 Securities Purchase Agreement by and among Coyote Ultimate Holdings, LLC, AMPAC Intermediate Holdings, LLC and NewMarket Corporation, dated December 1, 2023 (incorporated by reference to Exhibit 10.1 to Form 8-K (File No. 1-32190) filed December 4, 2023)

- 10.16 Credit Agreement, dated as of January 22, 2024, among NewMarket Corporation, the Foreign Subsidiary Borrowers party thereto, Bank of America, N.A., as Administrative Agent, Wells Fargo Bank, National Association, as Syndication Agent, and the Lenders party thereto (incorporated by reference to Exhibit 10.1 to Form 8-K (File No. 1-32190) filed January 25, 2024)
- 10.17 Term Loan Credit Agreement, dated as of January 22, 2024, among NewMarket Corporation, Bank of America, N.A. as Administrative Agent, Wells Fargo Bank, National Association, as Syndication Agent, and the Lenders party thereto (incorporated by reference to Exhibit 10.2 to Form 8-K (File No. 1-32190) filed January 25, 2024)
- 21 Subsidiaries of the Registrant
- 23 Consent of Independent Registered Public Accounting Firm
- 31(a) Certification pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, by Thomas E. Gottwald
- 31(b) Certification pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, by William J. Skrobacz
- 32(a) Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by Thomas E. Gottwald
- 32(b) Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by William J. Skrobacz
- 97 NewMarket Corporation Policy for the Recovery of Incentive Compensation
- 101 XBRL Instance Document and Related Items
- 104 Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)
- * Indicates management contracts, compensatory plans or arrangements of the company required to be filed as an exhibit
- (B) Exhibits The response to this portion of Item 15 is submitted as a separate section of this Annual Report on Form 10-K.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NEWMARKET CORPORATION

By:	/s/ Thomas E. Gottwald
,	(Thomas E. Gottwald, Chairman of the Board,
	President, and Chief Executive Officer)

Date: February 15, 2024

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated as of February 15, 2024.

SIGNATURE	TITLE
/s/ THOMAS E. GOTTWALD (Thomas E. Gottwald)	Chairman of the Board, President, Chief Executive Officer, and Director (Principal Executive Officer)
/s/ WILLIAM J. SKROBACZ (William J. Skrobacz)	Vice President and Chief Financial Officer (Principal Financial Officer)
/s/ GAIL C. RIDGEWAY (Gail C. Ridgeway)	Controller (Principal Accounting Officer)
/s/ MARK M. GAMBILL (Mark M. Gambill)	Director
/s/ BRUCE C. GOTTWALD (Bruce C. Gottwald)	Director
/s/ H. HITER HARRIS (H. Hiter Harris III)	Director
/s/ J. E. ROGERS (James E. Rogers)	Director
/s/ LILO S. UKROP (Lilo S. Ukrop)	Director
/s/ TING XU (Ting Xu)	Director



SHAREHOLDER INFORMATION

TICKER SYMBOL: NEU

TRANSFER AGENT:

Mailing Address: Computershare P.O. Box 43078 Providence, RI 02940-3078

Overnight Correspondence: Computershare 150 Royall St., Suite 101 Canton, MA 02021

Website: www.computershare.com/investor

Other inquiries should be directed to NewMarket's Shareholder Information Line

1-800-625-5191 or 1-312-360-5144

Hearing Impaired/TDD: 1-800-952-9245



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